CEBIS and controls guide

CLAAS LEXION combines

CEBIS and controls guide

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Images and content are intended to cover ALL features and options available on 2017 LEXION combines. Content may vary on each machine configuration.

LEXION Model: 780-670

Build Year: 2017

Effective Date: 6/1/2017

Last Revision: 6/20/2017

Contents

Layout

Features	
1	CEBIS display
2	Multi-function lever
3	Operator console

Console functions

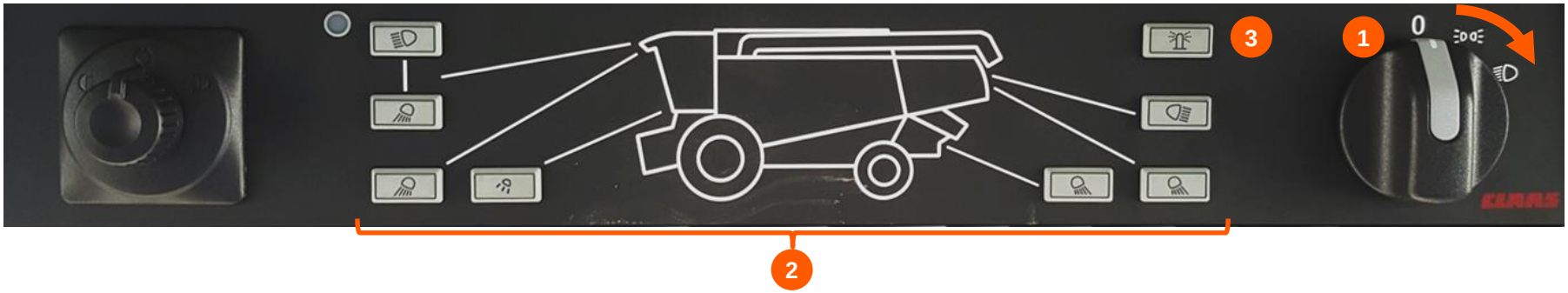
Ignition

Turn on engine	
1	Turn key to the right to start engine
2	Allow CEBIS to load before proceeding

Turn off engine	
1	Turn key to the left to stop the engine
2	If discounting the battery switch, wait two minutes to allow DEF lines to purge

Lighting

Procedure	
1	Rotate master light switch to far right position to turn lights on
2	With the master light switch on, the lights can be turned on/off individually by pressing their respective buttons
3	Beacon lights can be turned on/off regardless of dial position
4	Beacon lights settings can be changed in CEBIS Factory default is to turn on when the grain tank hits 70% full to alert the auger cart driver



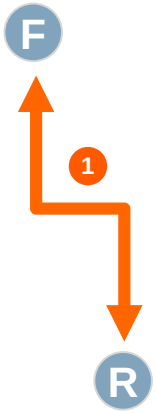
Green indicates light is on

Button layout

1	Left click dial
2	Right click dial
3	CEBIS rotary dial
4	HOTKEY rotary dial
5	Feederhouse engage
6	Processor engage
7	Header reverser
8	Multi-function trigger rocker switch
9	Gear select
10	Park brake
11	Grain tank open/close
12	Rear wheel assist
13	Throttle
14	Hazard lights
15	Road mode switch
16	Spot lights

Multi-function lever

A. CMOTION multi-function lever

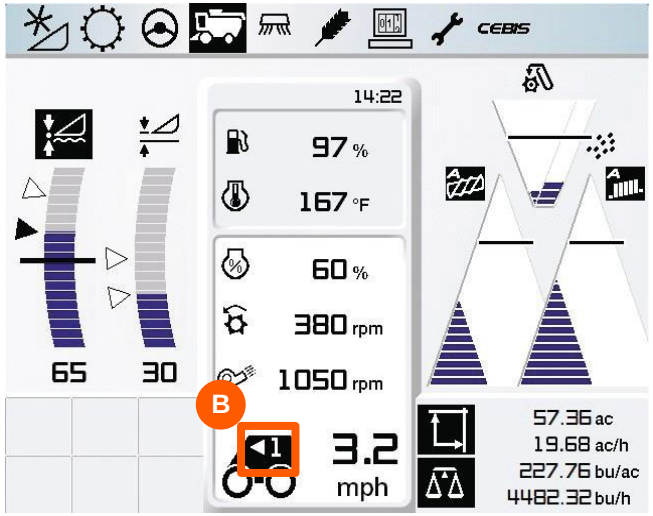


F	Forward
R	Reverse
1	Joystick pattern
2	Pre-set cutting height (ground contact)
3	Pre-set cutting height (fixed)
4	Manual feederhouse raise
5	Manual feederhouse lower
6	Reel position control button
7	Feederhouse brake
8	Unloading on/off
9	Unloading tube out/in
10	A-button
11	HOTKEY trigger

B. Standard multi-function lever

Transmission gear select

Procedure	
1	Stop and engage parking brake
2	Firmly apply the foot brakes
3	Tap the gear selector switch (A) (+) Shift up (–) Shift down
4	CEBIS will beep (3x), confirming gear change, as CEBIS screen shows the new gear (B)
5	Release the foot brakes

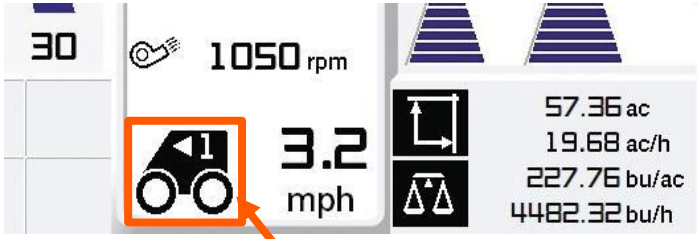


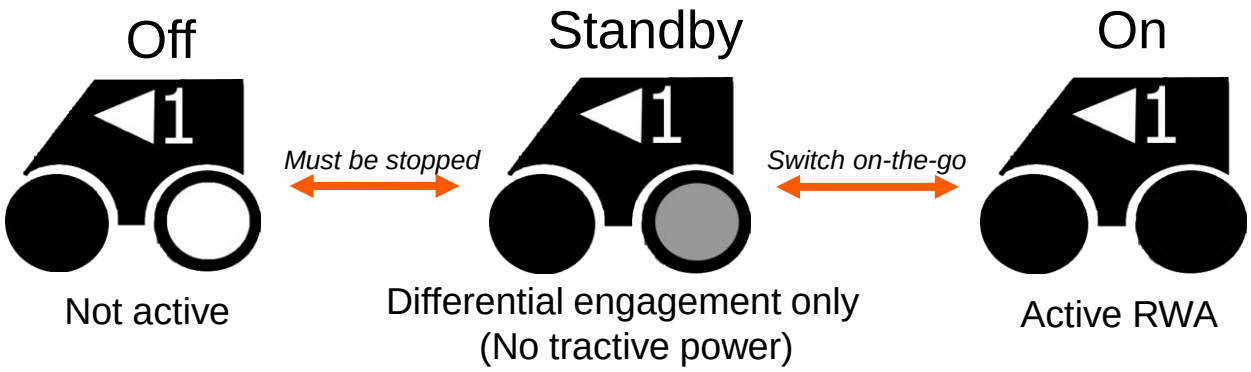
2 speed gearbox	3 speed gearbox
• 780TT • 780 • 760TT • 760 • 750TT • 740TT	• 750 • 740 • 730P • 730 • 670TT • 670

POWERTRAC rear wheel assist

Off ↔ standby	
1	Stop and engage parking brake
2	Firmly apply the foot brakes
3	Tap the RWA switch
4	CEBIS will beep, confirming change
5	CEBIS screen will show the new status

Standby ↔ on	
1	Tap the RWA switch
2	CEBIS will beep, confirming change
3	CEBIS screen will show new status





Processor & feederhouse on/off

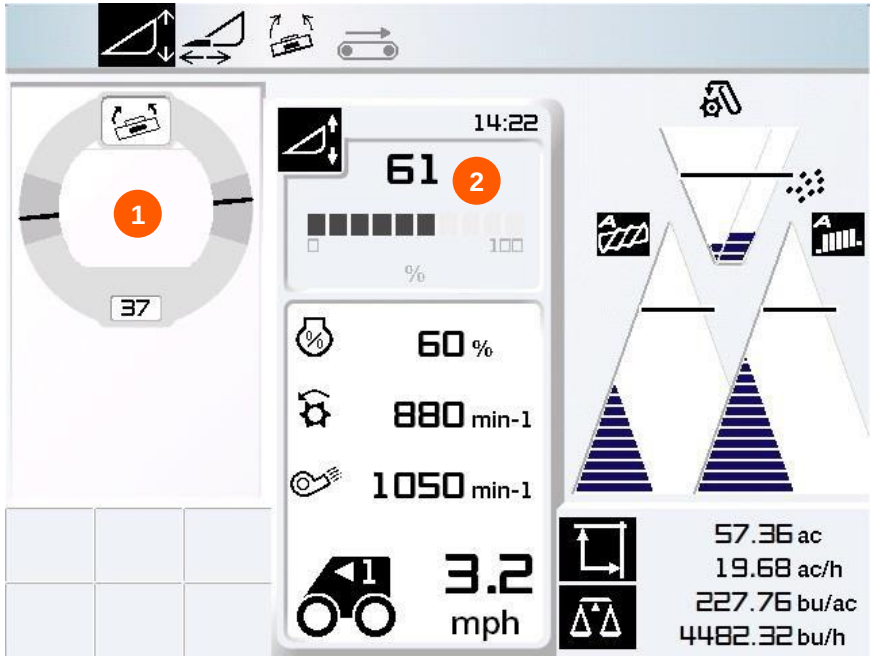
Processor engagement	
1	Throttle to low (A)
2	Squeeze the yellow knob and collar, pull up (B)
3	Switch remains up

Feederhouse & header engagement	
1	Throttle to low (A)
2	Squeeze the yellow knob and collar, pull up (C)
3	Switch pops down System remains engaged

Disengage	
Processor	Push the processor switch down This will disengage header as well
Header	1. Push the header switch down 2. Tap header brake on the multi-function lever

Multi-function trigger rocker switch

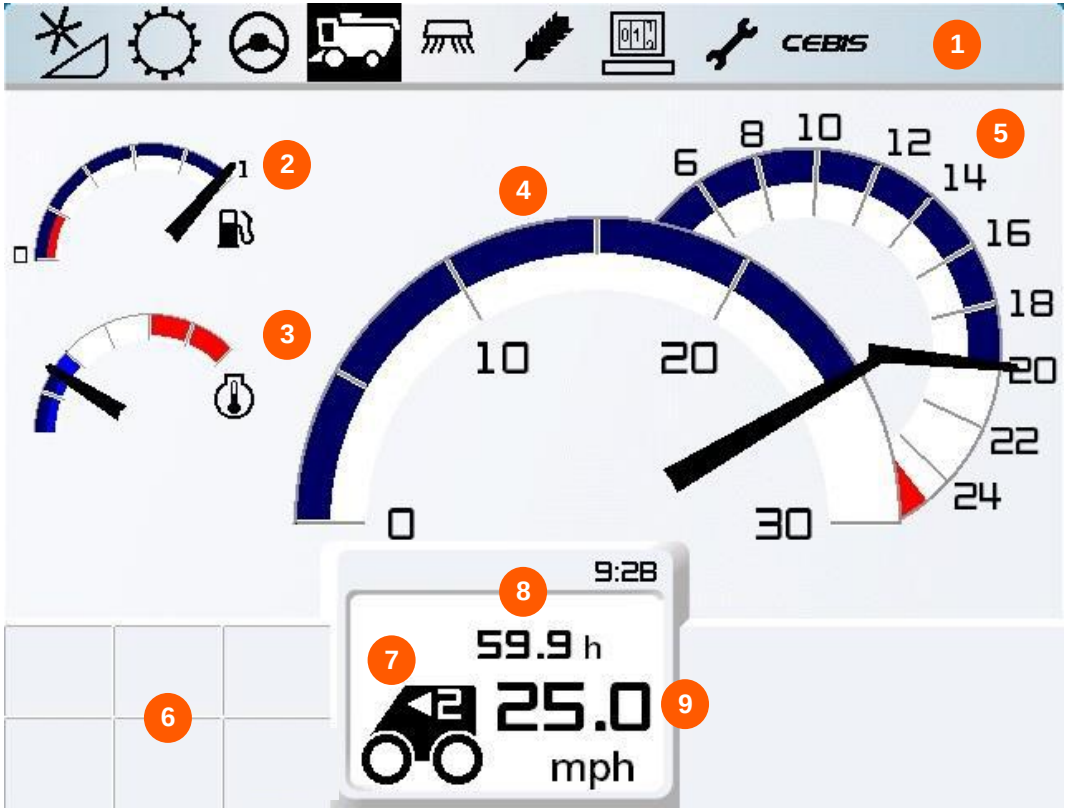
Positions	
1	Header tilt
2	HOTKEY adjustment
3	CLAAS header functions ▪ MAXFLEX table flex ▪ VARIO table extend/retract ▪ MAXFLO conveyor reverse



CEBIS monitor

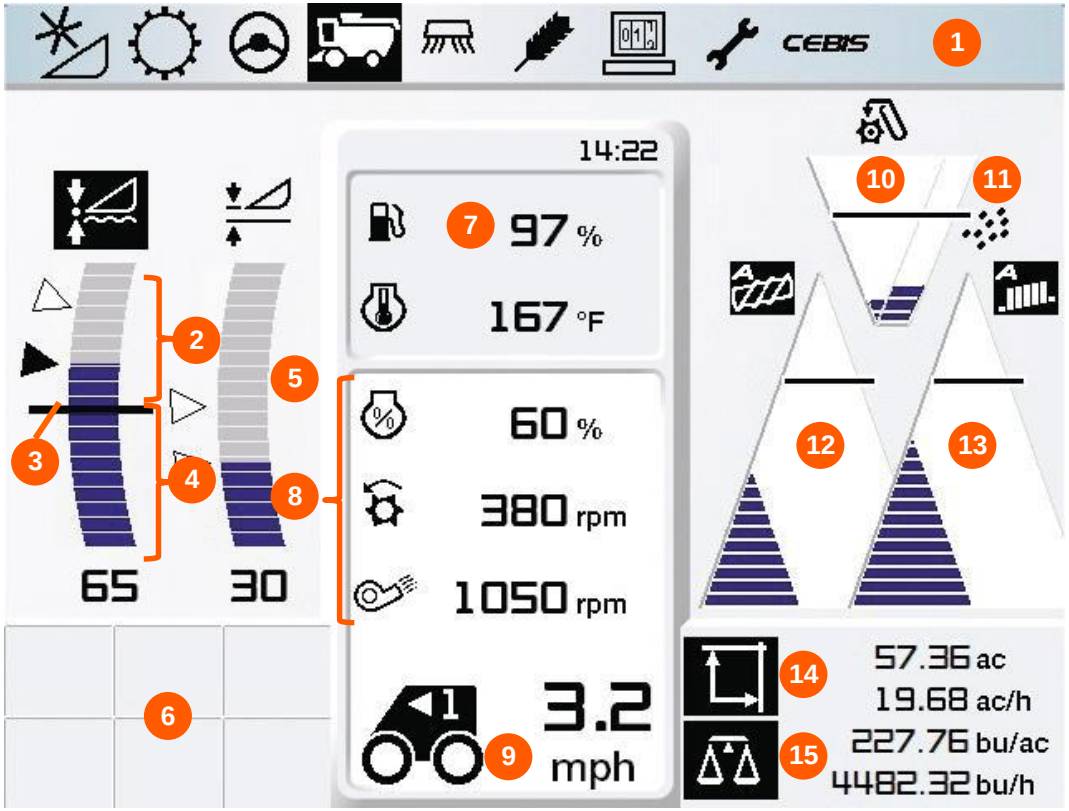
Road travel screen

Features	
1	Main menu header
2	Fuel & DEF levels
3	Coolant temp
4	Analog speedometer
5	Engine speed
6	Machine information window
7	Transmission gear indicator
8	Engine hours
9	Digital speedometer



Harvest screen

Features	
1	Main menu header
2	Header cutting height (CAC)
3	Surface of the ground
4	Header cutting height (ground pressure)
5	Pre-set cutting heights above
6	Machine information window
7	Menu header icon display
8	User defined display
9	POWER TRAC status
10	Returns volume
11	GRAINMETER
12	Separation loss display
13	Cleaning system loss display
14	Acre counter status
15	QUANTIMETER status

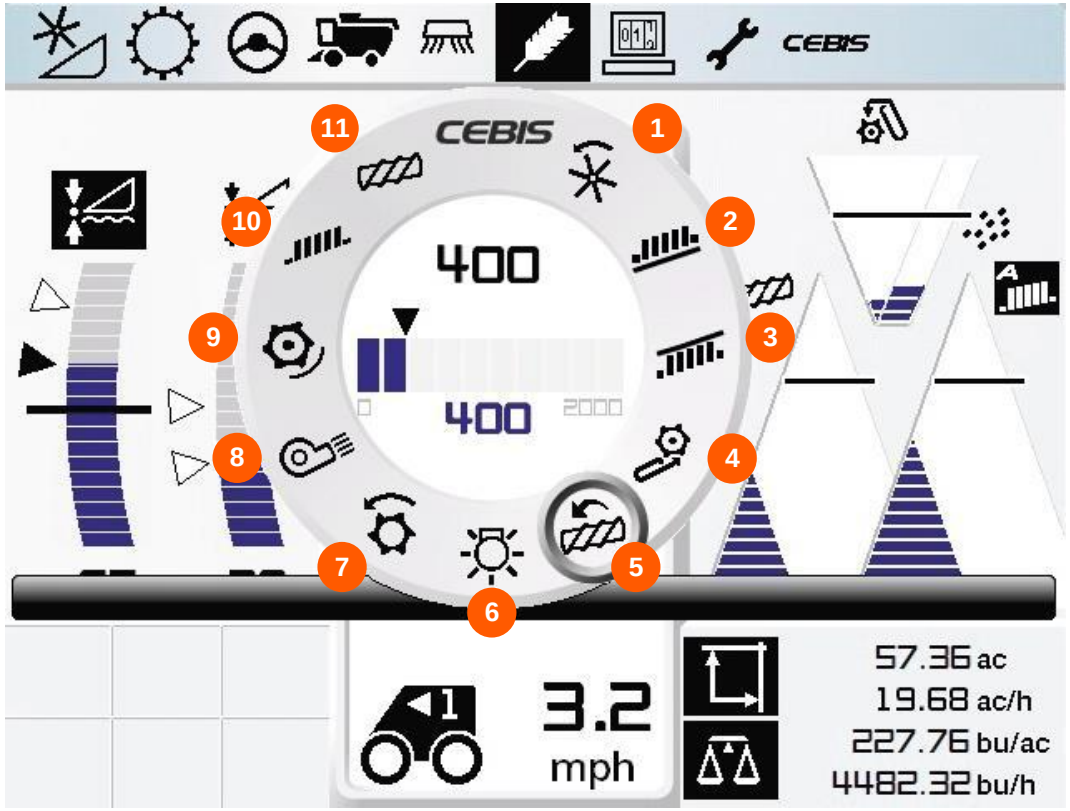


CEBIS navigation and control select

	Feature	Function
1	Click dial (CEBIS)	Rotate to move cursor and change values Push down to select/confirm
2	CEBIS rotary dial	Switch between machine settings functions
3	Escape button	Back out to previous menu or function
4	Click dial (HOTKEY)	Rotate to adjust HOTKEY values up/down Push down to select HOTKEY options
5	HOTKEY rotary dial	Menu
6	Information	Information about current features/settings
7	Direct access	Last menu setting or backup camera image

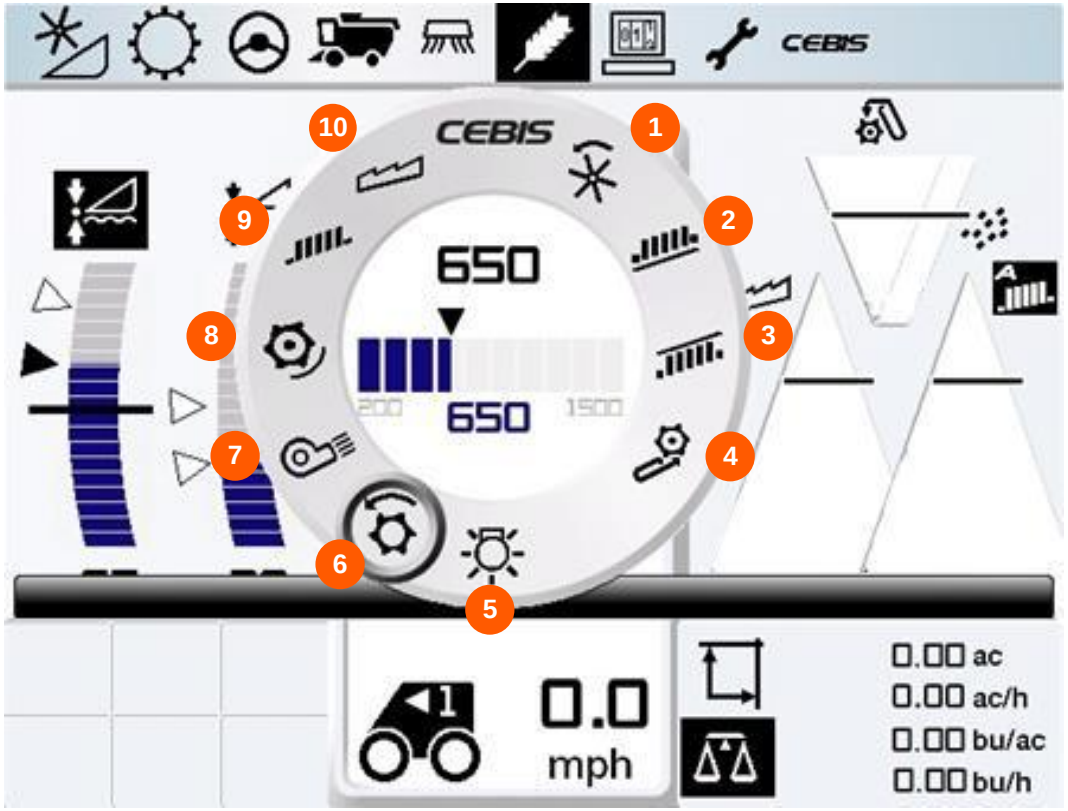
CEBIS rotary dial menu (LEXION 700)

Features	
1	Reel speed adjust
2	Upper sieve adjust
3	Lower sieve adjust
4	Feederhouse speed adjust
5	Rotor speed adjust
6	Display brightness adjust
7	Threshing speed adjust
8	Cleaning fan speed adjust
9	Concave adjust
10	Sieve loss sensor sensitivity adjust
11	Rotor loss sensor sensitivity adjust



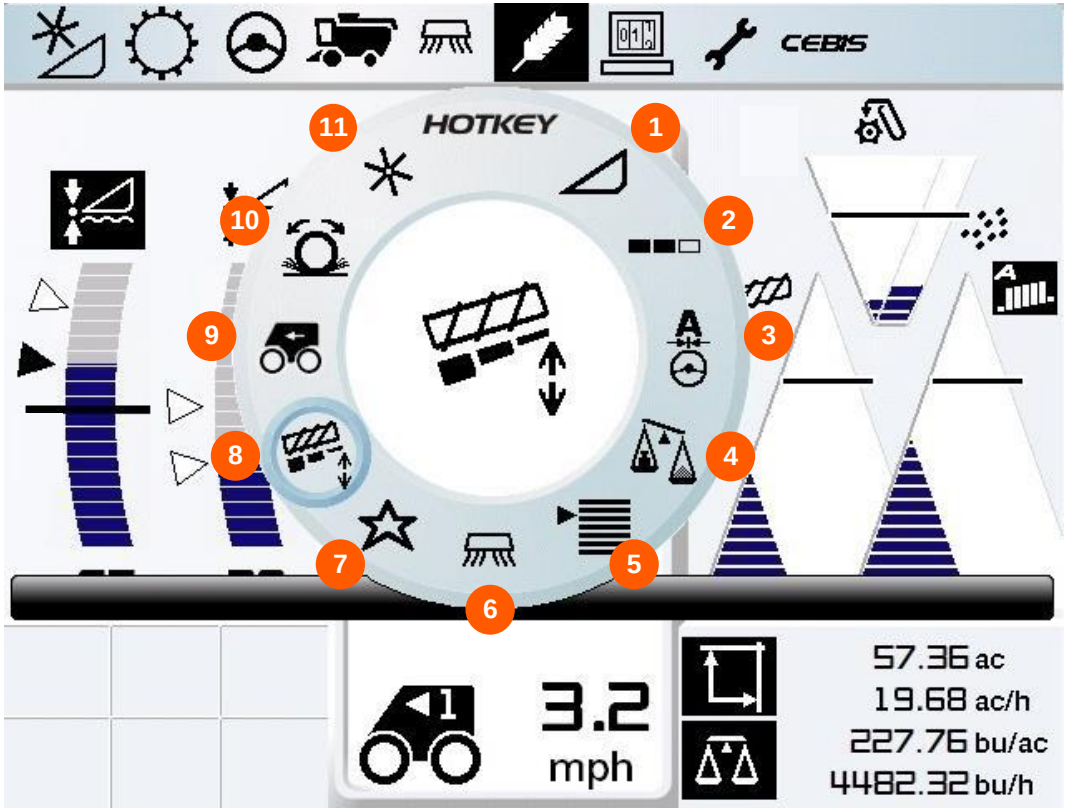
CEBIS rotary dial menu (LEXION 600)

Features	
1	Reel speed adjust
2	Upper sieve adjust
3	Lower sieve adjust
4	Feederhouse speed adjust
5	Display brightness adjust
6	Threshing speed adjust
7	Cleaning fan speed adjust
8	Concave adjust
9	Sieve loss sensor sensitivity adjust
10	Walker loss sensor sensitivity adjust



HOTKEY menu (LEXION 700)

Features	
1	Cutting height position adjust
2	Partial cutting width adjust
3	AUTO PILOT centering
4	Yield test weight adjust
5	Job management
6	Residue management
7	Favorites (crop settings)
8	Rotor cover plate adjust
9	CRUISE PILOT adjust
10	Driving strategy adjust
11	Auto reel speed adjust



HOTKEY menu (LEXION 600)

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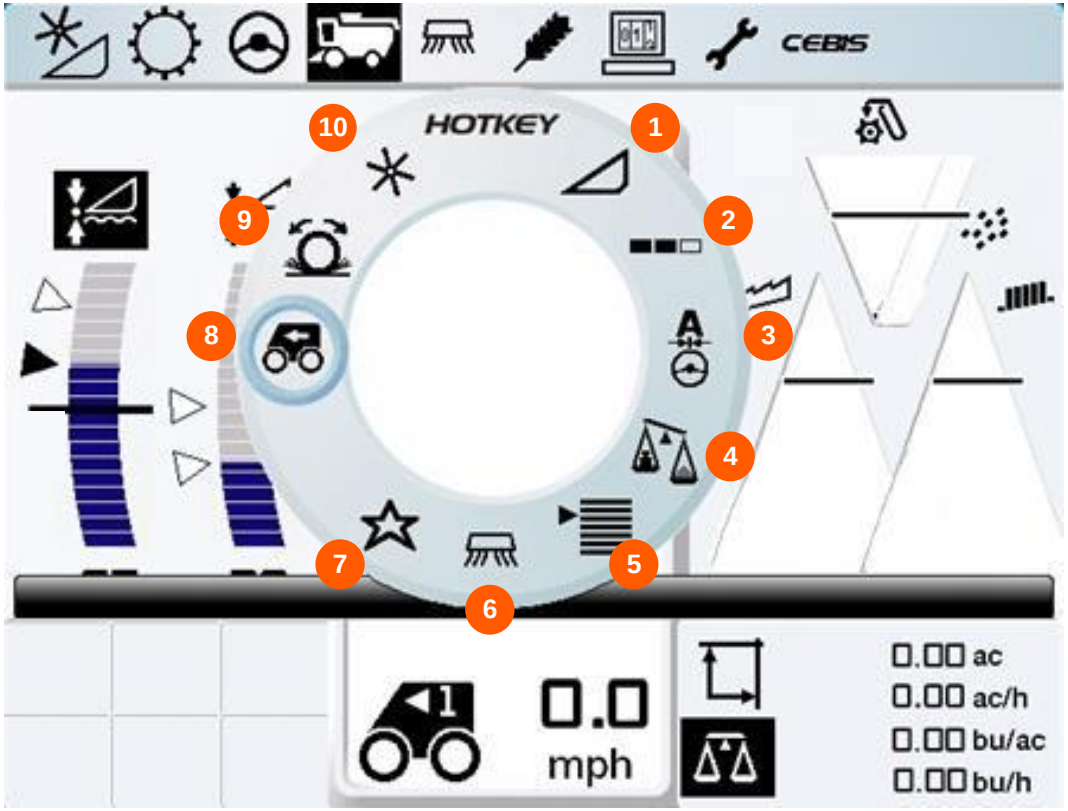
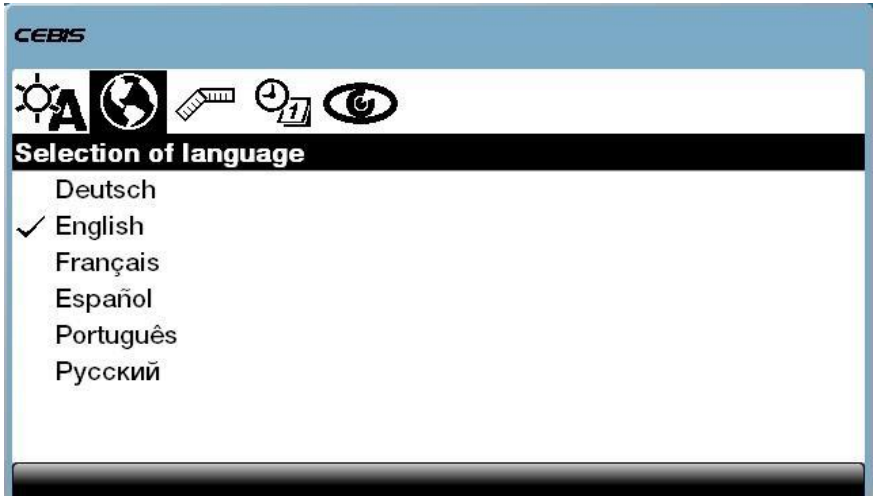


Step 1: CEBIS language and measuring units

When to perform: as needed

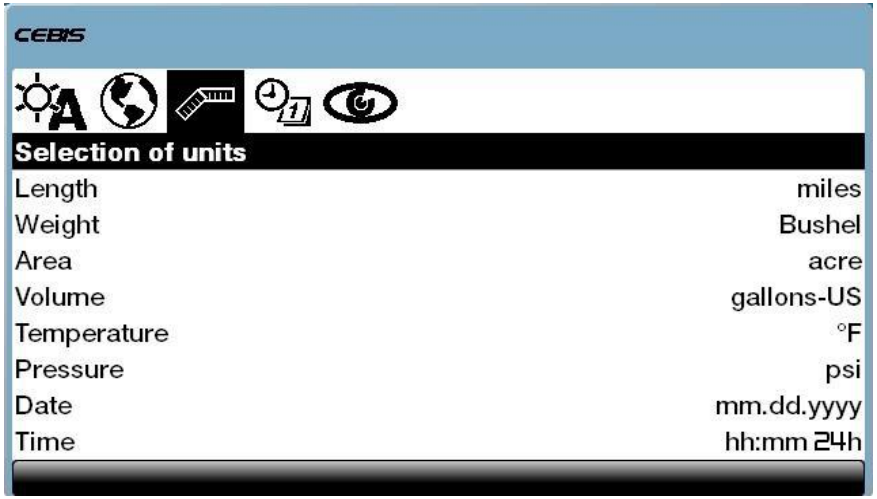
Navigate to: CEBIS / 

1. **Language settings:** set your preferred CEBIS display language



Navigate to: CEBIS / 

2. **Measuring unit settings:** set your preferred CEBIS display units of measure



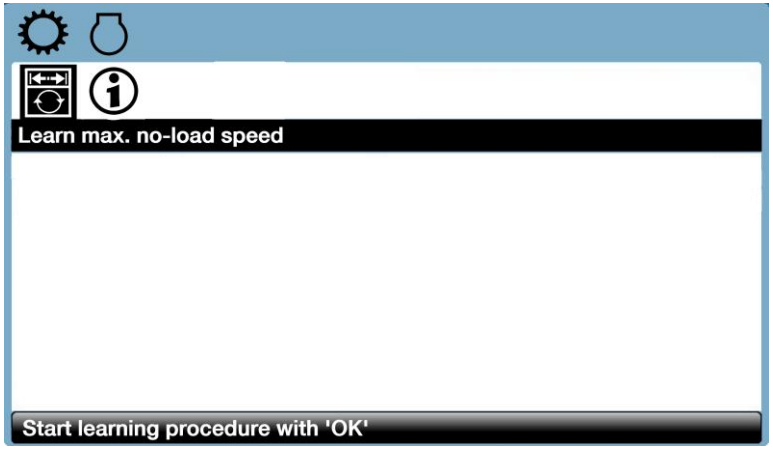
Step 2: Speed sensor calibration

When to perform: each header change, switching between chopping/windrowing, after belt/chain tensioning

Navigate to: / /

1. **Max. no-load speed** calibrates the main engine speed sensor. Always perform prior to performing the learning speeds calibration

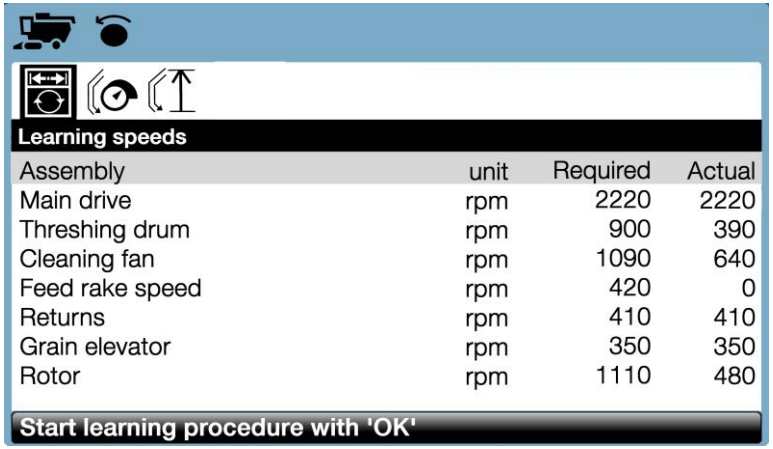
Procedure	
1	Stop and engage parking brake
2	Throttle to full
3	Press “OK” to learn engine speed



Navigate to: / /

2. **Learning speeds** calibrates speed sensors around the combine

Procedure	
1	Stop and engage parking brake
2	Engage processor & header
3	Throttle to full
4	Press “OK” to learn belt speeds



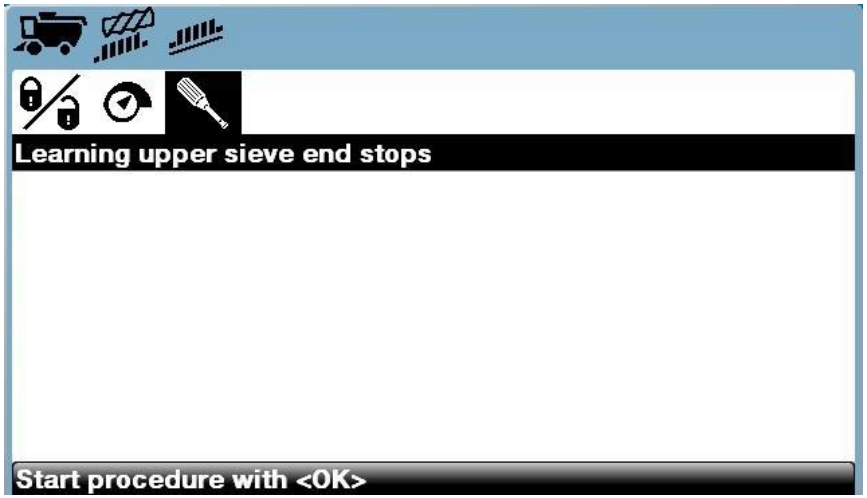
Step 3: Learn sieve end stops and set-up returns monitor

When to perform: at the start of harvest, after a sieve change or reconnecting a sieve motor

Navigate to: / /

1. **Learn upper and lower sieve end stops** learns the maximum range of travel of each sieve

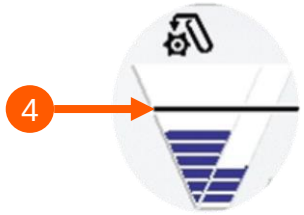
Procedure	
1	Stop and engage parking brake
2	Press “OK” to learn end stops
3	Repeat for lower sieve

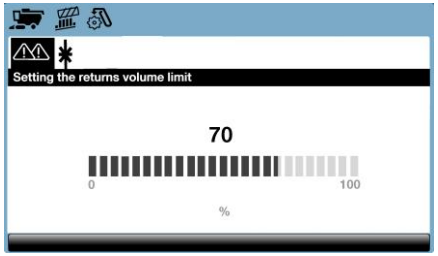


Navigate to: / /

2. **Learning zero returns volume** and **setting the returns volume limit** calibrate the return elevator

Procedure	
1	Stop and engage parking brake
2	Engage the processor and throttle to full
3	Press “OK” to learn zero returns volume
4	Returns volume limit controls where the returns line sits on the harvest screen (default is 70)



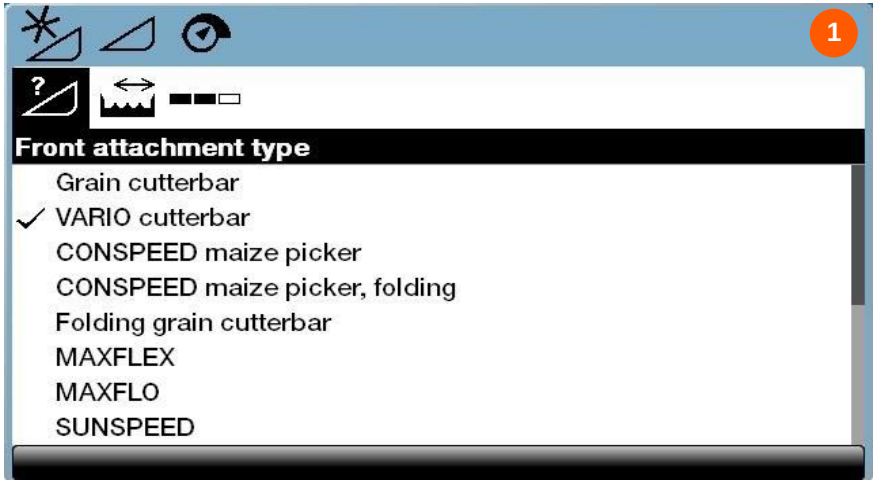


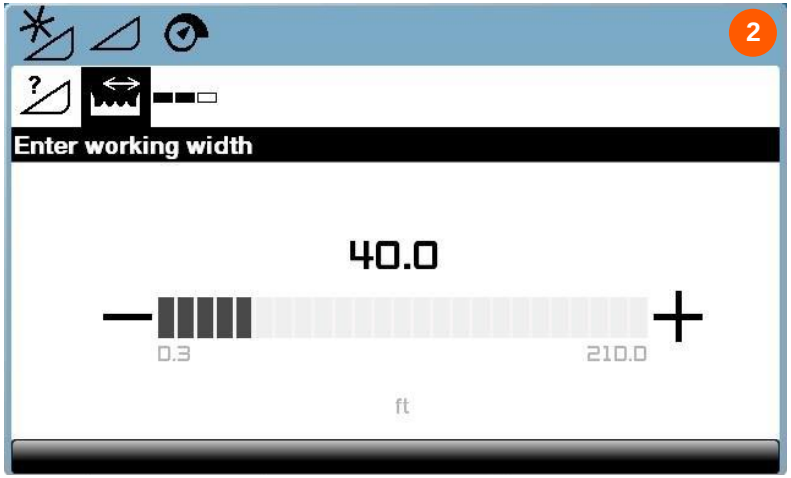
Step 4: Header type and cutting width

When to perform: every header change

Navigate to: / /

Procedure	
1	Select header type
2	Set the cutting width of the current header





Step 5: Learn feederhouse travel limits

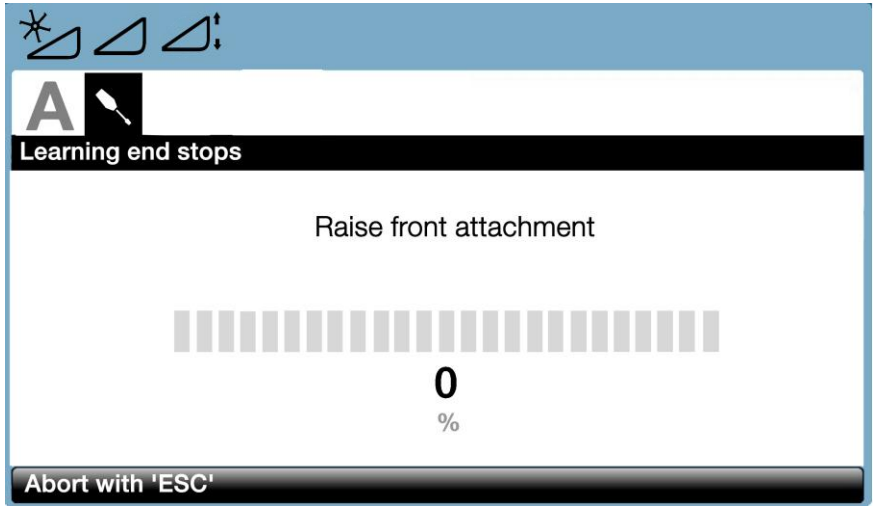
When to perform: every header change

Navigate to: /

1. **Feederhouse limits** learns the maximum travel limits of:

   - Feederhouse raise/lower
   - Lateral tilt
   - Fore/aft header pitch (HP feederhouse only)

Procedure	
1	Stop and engage parking brake
2	Engage processor and header
3	Navigate to “ “ under each menu
4	Press “OK” and follow instructions on screen



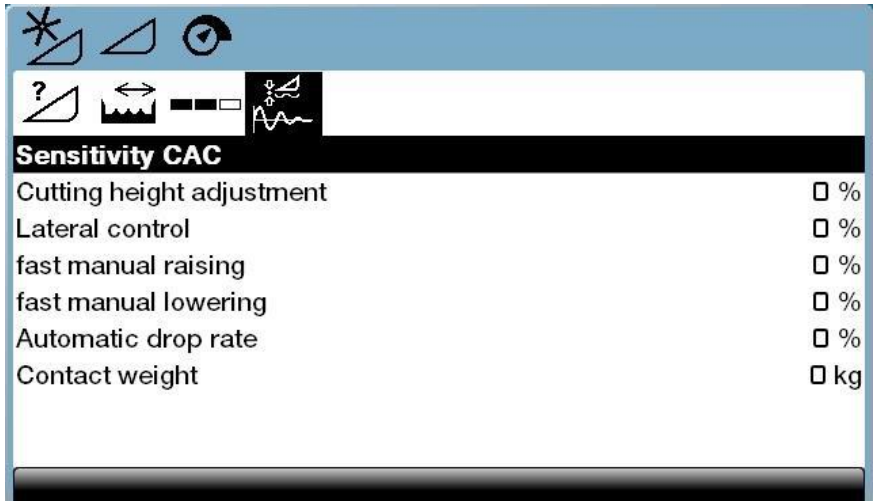
Step 6: AUTO CONTOUR settings

When to perform: as needed / between different header types

Navigate to: / / /

1. **Sensitivity and speed settings:** adjust the sensitivity and rate of travel for the automatic header functions

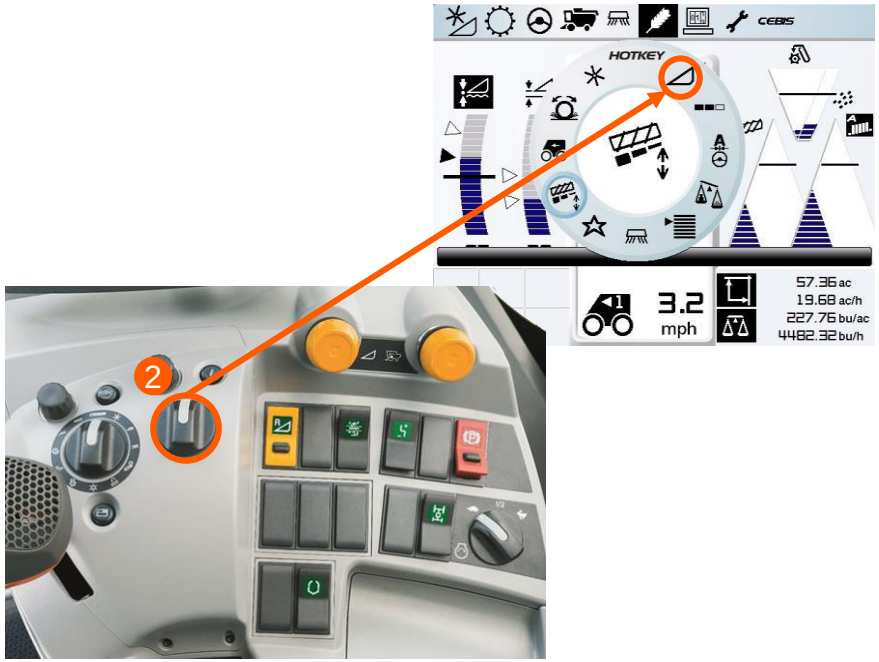
Setting	
Cutting height adjustment	Sensitivity to terrain changes up and down
Lateral leveling	Sensitivity for side-to-side header tilt adjustment
Fast manual raising	Speed when firmly pressing “manual header raise” button
Fast manual lowering	Speed when firmly pressing “manual header lower” button
Automatic drop rate	Drop speed from a headland (raised) preset into a working (lowered) preset

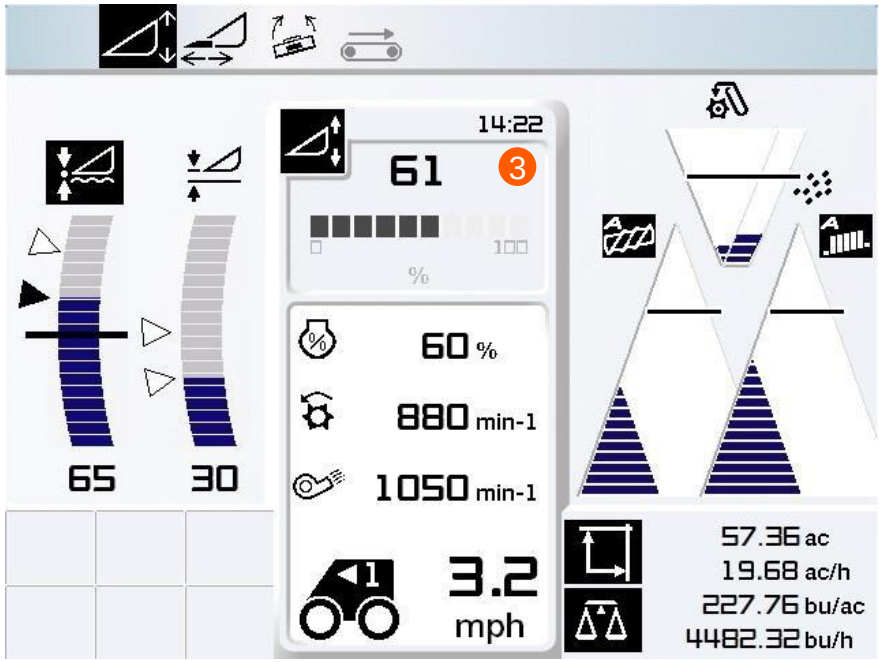


Step 7: Setting and adjusting individual cutting heights

When to perform: as needed

Procedure	
1	Select a preset on multi-function lever
2	Turn HOTKEY to header options → header height
3	Use HOTKEY click dial to adjust preset up or down

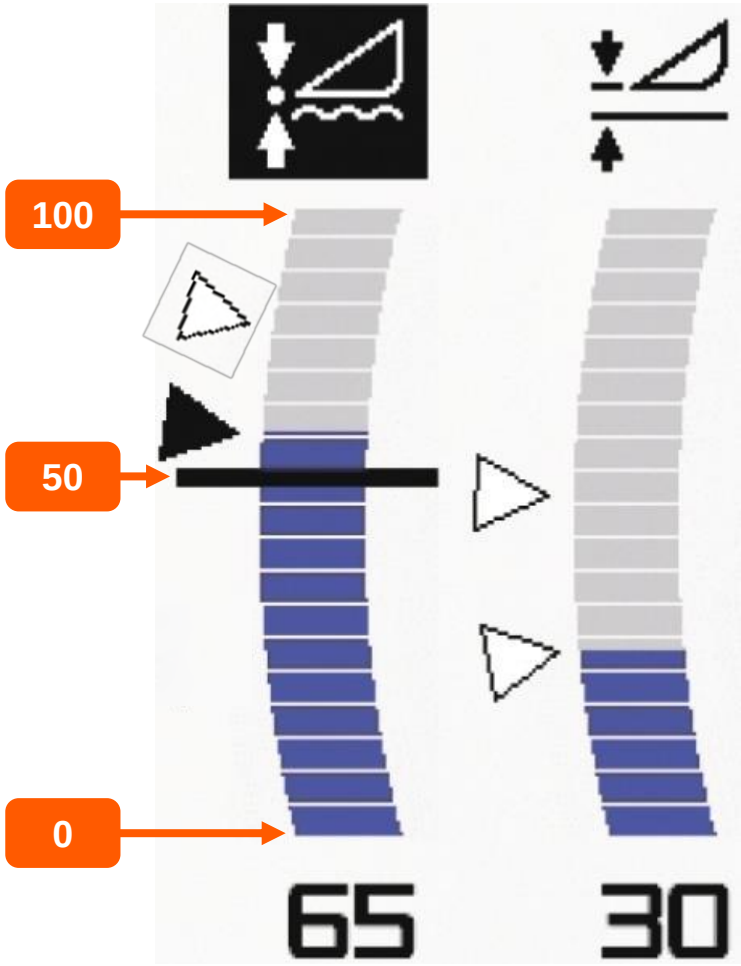




Step 8: Setting and adjusting individual cutting heights (cont.)

When to perform: as needed

Recommended settings by header type	
Lateral tilt compensation (header sensors)	
Flex heads in flex mode	60 – 75
Rigid heads and corn heads	50 – 100
Black line represents the surface of the ground after learning cutting height limits	
Vertical compensation (ground pressure sensor)	
Rigid heads	45 – 47
100	Little to no contact with the ground, sensor bands extended
50	Light contact with ground surface, sensors bands retracted
0 – 50	Full contact with the ground, sensor bands are completely retracted
Do not operate below 45	



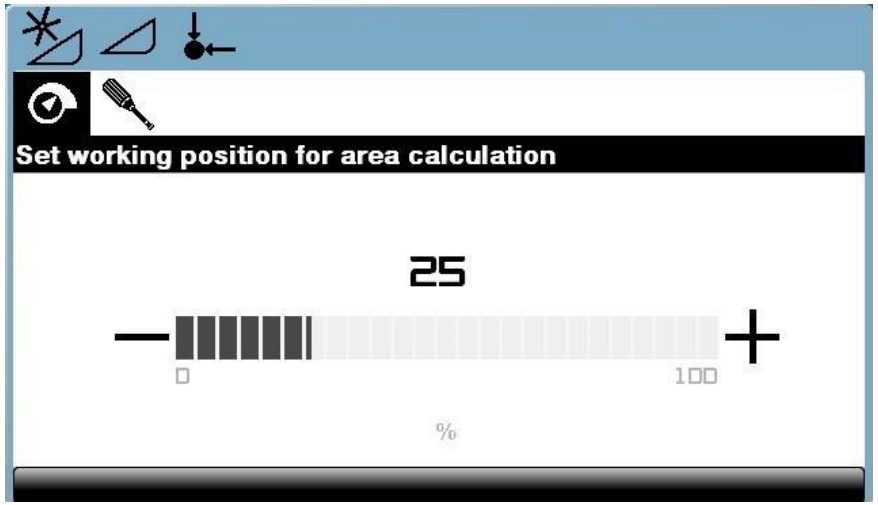
Step 9: Setting working position

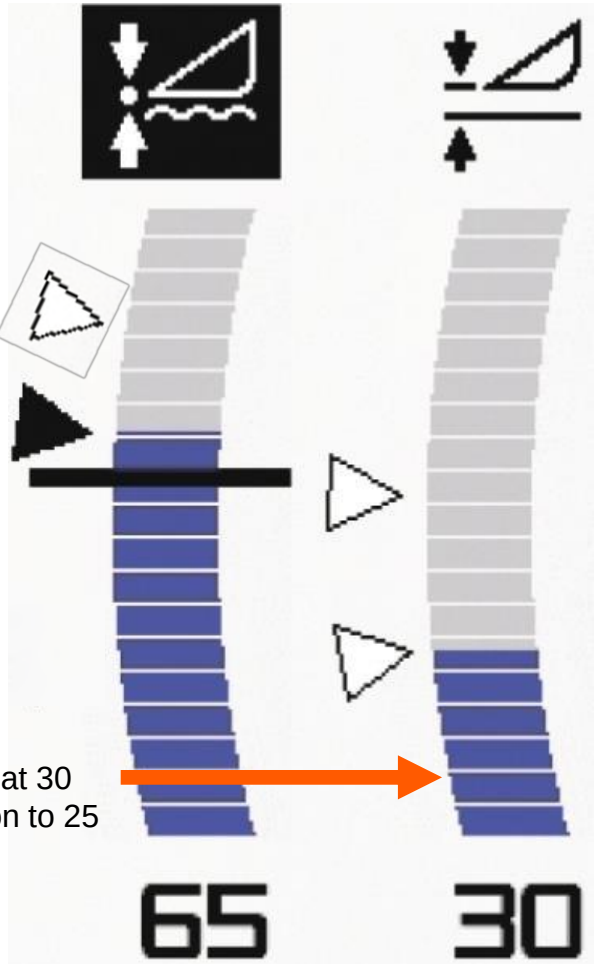
When to perform: as needed

Navigate to: / /

1. **Setting the working position** establishes the shutoff point for the acre counter when raising the header

Procedure	
1	Set the working position slightly underneath the lowest feederhouse preset





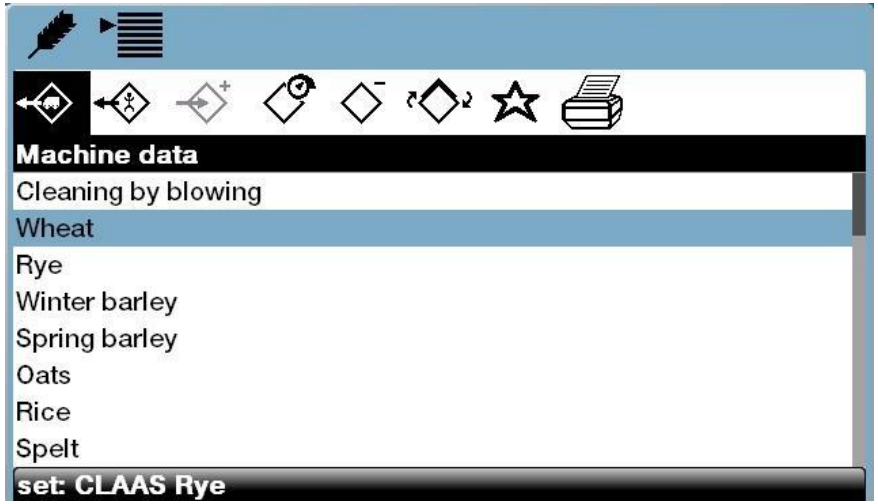
Example:
Lowest preset is at 30
Set working position to 25

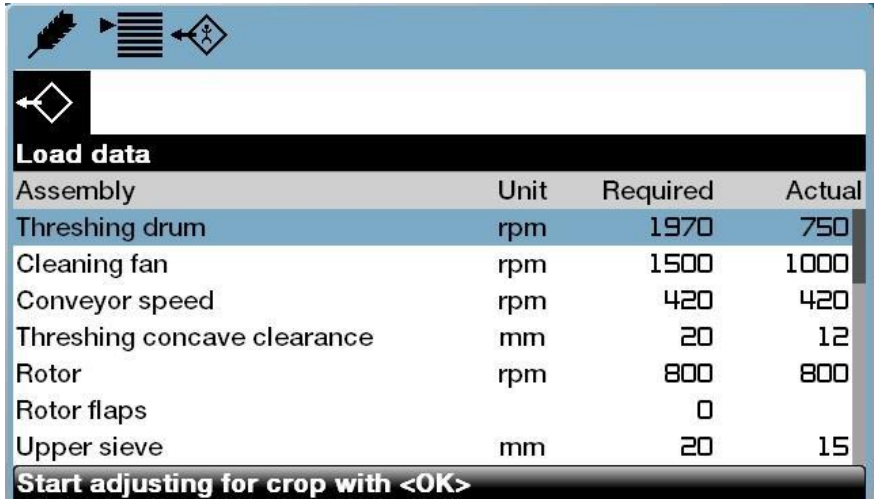
Step 10: Load crop settings

When to perform: when changing to a new crop type

Navigate to: /

Options	
	Lists CLAAS provided settings as a starting point for different crops; select to see the settings, then push “OK” to set the machine to those settings
	List of customized settings, as saved by the operator
	Save the current combine settings
	Edit custom settings
	Delete custom setting
	Rename custom setting
	Assign favorites for quick access via the HOTKEY



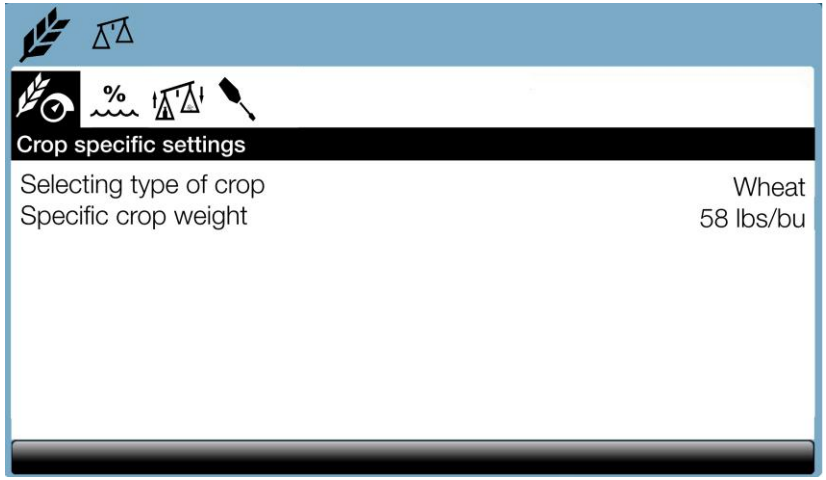


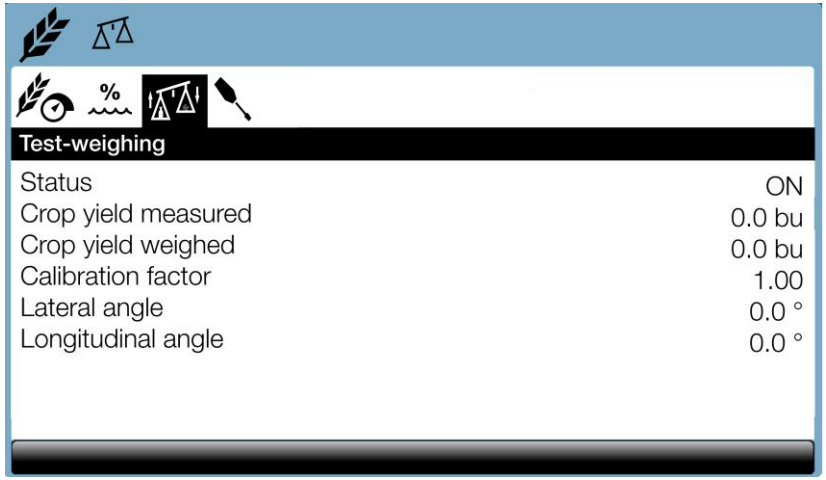
Step 11: QUANTIMETER yield setup

When to perform: start of each crop type and periodically throughout harvest to confirm accuracy

Navigate to: /

Procedure	
1	Enter crop type & test weight
2	With machine parked and running, calibrate zero yield ( )
3	On test-weighing screen ( ) turn status to ON
4	Harvest a load of grain that can be measured (half grain tank minimum)
5	Weigh the grain in the truck or cart if used
6	$\frac{\text{Crop weight}}{\text{Test weight}} = \text{Crop yield weighed}$
7	Calibration factor will adjust automatically after the crop weighed is entered.



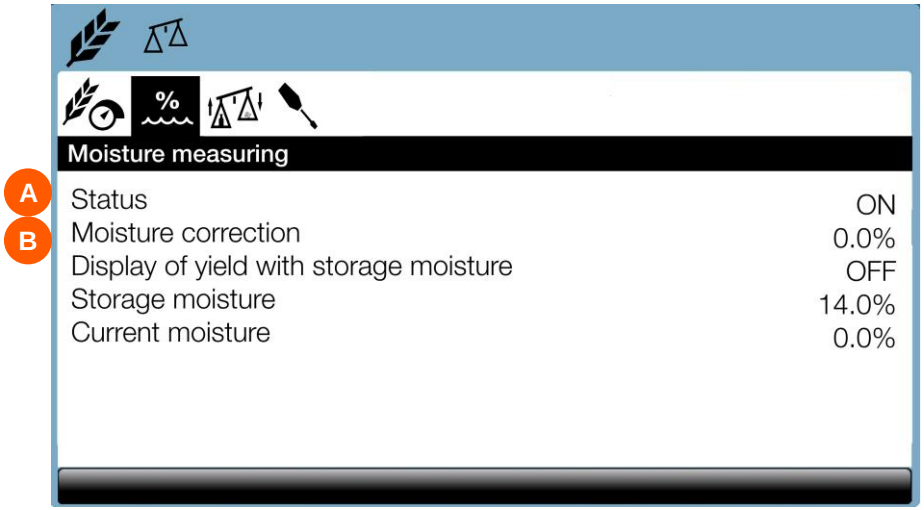


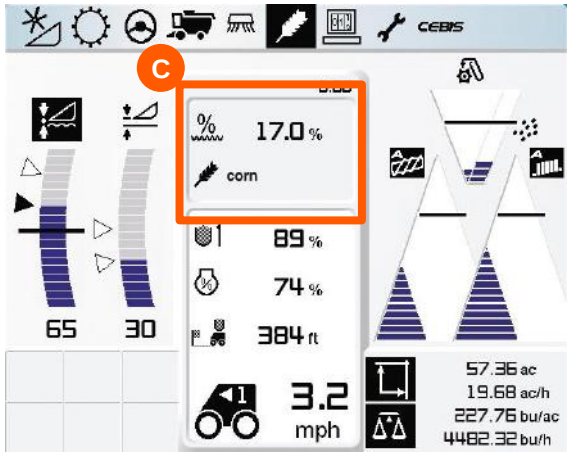
Step 12: Calibrating the QUANTIMETER moisture sensor

When to perform: start of each crop type and periodically throughout harvest to confirm accuracy

Navigate to: / /

Procedure	
1	Switch status (A) to “ON”
2	Determine actual grain moisture
3	Observe combine’s moisture readout (C) while harvesting
4	Adjust the “moisture correction” (B) value to shift the combine readout up or down to match the true moisture



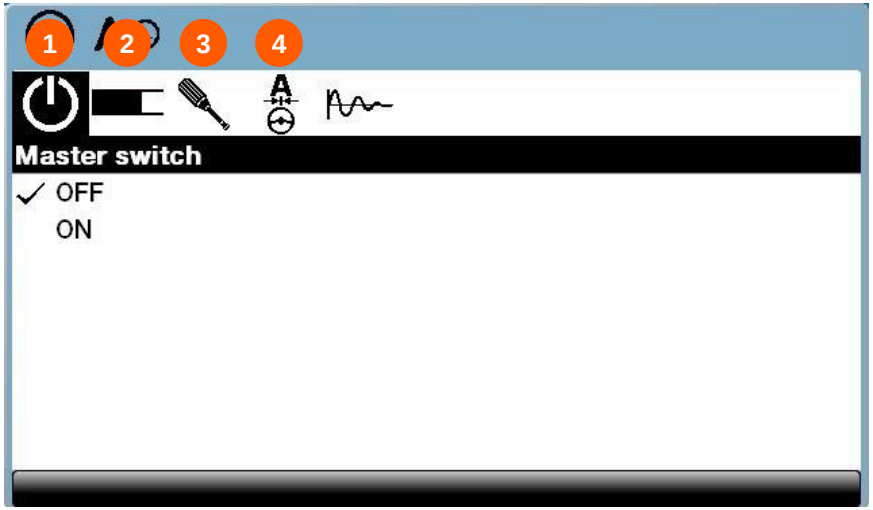


Step 13: AUTO PILOT set-up

When to perform: at the start of harvest and whenever changing between guidance methods

Navigate to: / A

Procedure	
1	Turn master switch “ON”
2	Select proper guide sensor ▪ No sensor ▪ Touch arms (corn heads with row feelers) ▪ GPS (not offered in North America) ▪ CLAAS steering interface (Ag Leader, Trimble, etc.)
3	Turn wheels straight and press “OK” to learn the straight ahead position (|↔|)
4	If using touch arms (corn heads) press “OK” when arms are in default position (▬)
5	Engage via A-button on multi-function lever

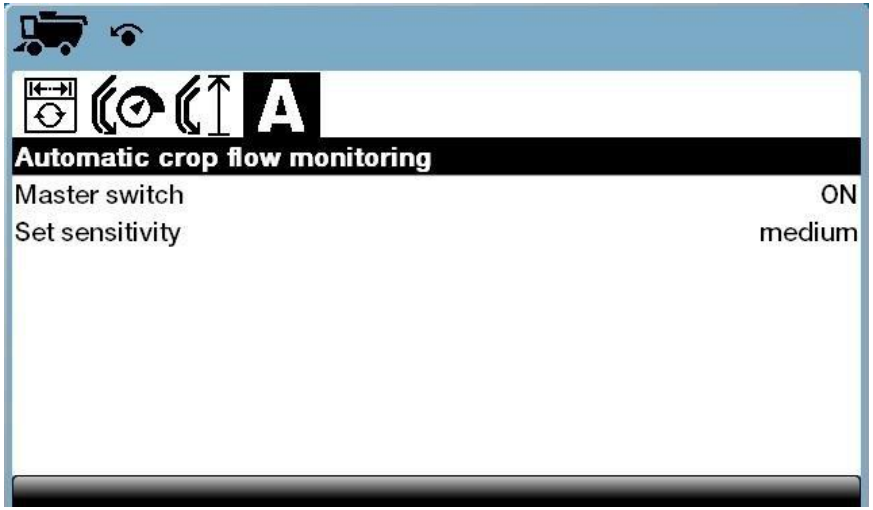


Step 14: AUTO CROP FLOW

When to perform: as needed

Navigate to: / / A

Procedure	
1	Turn master switch “ON”
2	Set sensitivity Determines the sensitivity of the monitroring system; how much slip is allowed

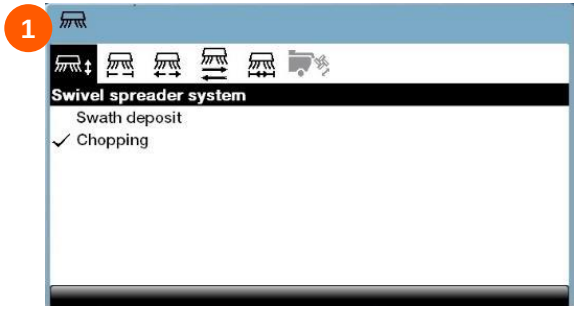


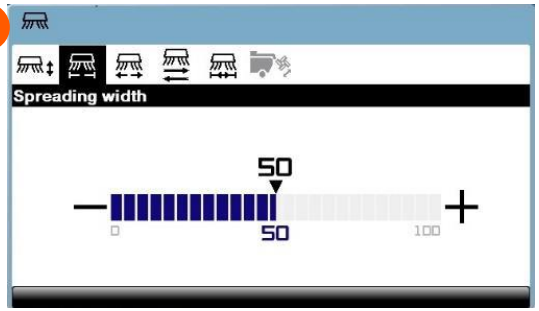
Step 15: Residue management

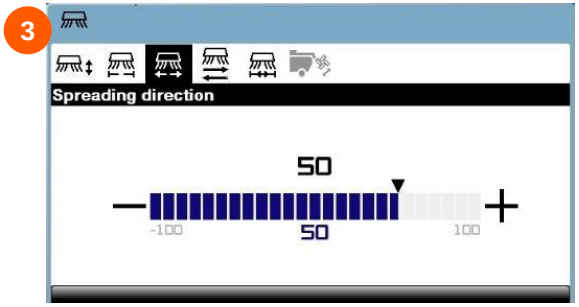
When to perform: as needed

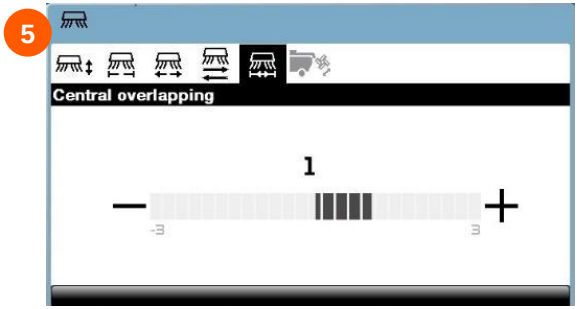
Navigate to:

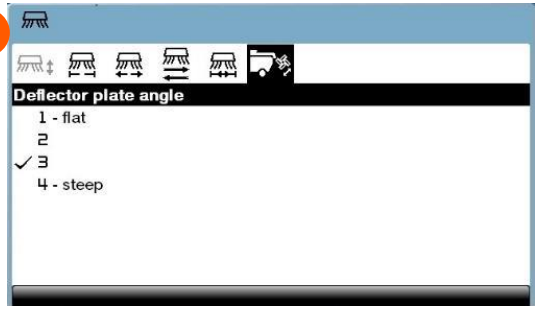
Procedure	
1	Change between spreading and windrowing
2	Adjust spread width
3	Offset spread width (wind compensation)
4	Reverse spreading direction (when using offset spread width)
5	Adjust amount of center overlap
6	Adjust tailboard angle









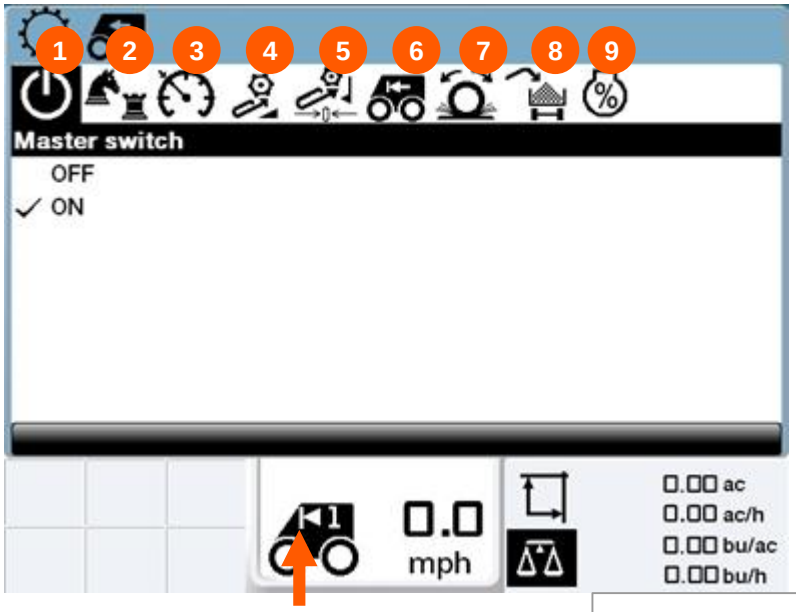


Step 16: CRUISE PILOT setup

When to perform: at the start of each crop type

Navigate to: /

Procedure	
1	Turn master switch “ON”
2	Select desired mode ▪ Cruise Control (constant speed) ▪ Constant throughput ▪ Monitored throughput (recommended)
3	Set target speed (only for cruise control mode)
4	Set target throughput index value Can be done in CEBIS, or by holding A-button button for 5 seconds while harvesting desired throughput
5	Calibrate zero throughput by pressing “OK” (when machine is not harvesting)
6	Set max speed
7	Set driving sensitivity
8	Unloading mode



Line indicates CRUISE PILOT is active

Disengage CRUISE PILOT by either:
1. Pull back on multi-function lever
2. Tap the foot brakes

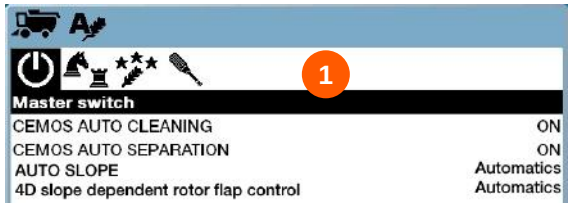
Engage CRUISE PILOT by:
1. A-button button on multi-function lever

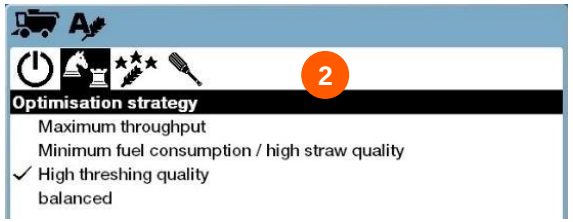
Step 17: CEMOS AUTOMATIC setup

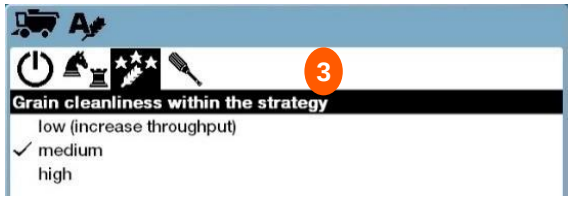
When to perform: at the start of each crop type

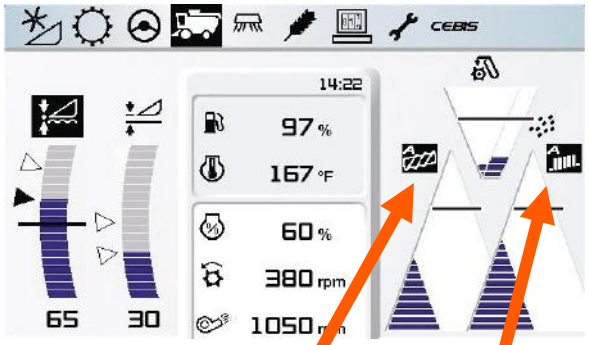
Navigate to: /

Procedure	
1	Turn master switch “ON” for both CEMOS AUTO CLEANING and CEMOS AUTO SEPARATION
2	Choose optimization strategy ▪ Max throughput (high capacity, more potential FM) ▪ Min fuel consumption (low rotor speed) ▪ High thresh quality (less FM, lower capacity) ▪ Balanced (mix of above strategies)
3	Select grain cleanliness within the strategy
4	Learning inclination ▪ Calibrates combine angle sensor ▪ Must be on level ground
5	Activate CEMOS AUTOMATIC via A-button









CEMOS Automatic Separation engaged

CEMOS Automatic Cleaning engaged

Step 18: 4D cleaning / AUTO SLOPE

When to perform: as needed

Navigate to: /

Procedure (4D Cleaning)	
1	With CEMOS AUTO SEPARATION enabled, 4D cleaning will be controlled automatically
2	With CEMOS AUTO SEPARATION disabled, 4D can be enabled via the master switch (A)

Procedure (AUTO SLOPE)	
1	With CEMOS AUTO CLEANING enabled, AUTO SLOPE will be controlled automatically
2	With CEMOS AUTO CLEANING disabled, AUTO SLOPE can be enabled via the master switch (B)

Recommended starting settings

Recommended starting settings

Alfalfa

Cleaning fan reduction pulley required to achieve optimal cleaning fan speed. A fixed hole lower sieve can be used to further clean grain sample, available from CLAAS parts.

Feederhouse drum position	Up, down if in rocks
Feederhouse speed	420 rpm
Pre-concave types	6.5 or 6.5x40 mm keystock
Pre-concave rear filler plate	Installed
Dis-awning plates	Closed
Intensive threshing segments	Installed as needed
Concave gap	8 mm
Threshing cylinder speed range	High
Threshing cylinder speed	800 rpm
Concave filler plates	(3-6) installed on N18 large wire concave - beginning at row #2
Rotor speed	900 rpm
Rotor cover plates	2 - 4 closed
Cleaning fan speed	450 rpm
Upper sieve	Standard: 4 TM6: 4
Lower sieve	Standard: 2 TM6: 2
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Barley

For high straw quality and very dry conditions, refrain from using intensive threshing segments.

Feederhouse drum position	Down
Feederhouse speed	400 rpm
Pre-concave types	6.5, 10 or 12x40 mm
Pre-concave rear filler plate	Installed, only in corn models
Dis-awning plates	Closed
Intensive threshing segments	Installed, as needed
Concave gap	12 mm
Threshing cylinder speed range	High
Threshing cylinder speed	750 rpm
Concave filler plates	(3) installed on N18 large wire concave - beginning at row #2
Rotor speed	850 rpm
Rotor cover plates	Open, close as needed
Cleaning fan speed	1100 rpm
Upper sieve	Deep-tooth: 9 Standard: 15 TM6: 15
Lower sieve	Deep-tooth: 0 - 2 Standard: 9 TM6: 9
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Recommended starting settings

Blue grass

Cleaning fan reduction pulley required to achieve optimal cleaning fan speed.

Feederhouse drum position	Down
Feederhouse speed	420 rpm
Pre-concave types	6.5 or 6.5x40 mm keystock
Pre-concave rear filler plate	Installed
Dis-awning plates	Closed
Intensive threshing segments	Not installed
Concave gap	10 mm
Threshing cylinder speed range	High
Threshing cylinder speed	800 rpm
Concave filler plates	(4-6) installed on N18 large wire concave - beginning at row #2
Rotor speed	900 rpm
Rotor cover plates	(2-3) closed, more as needed
Cleaning fan speed	350 rpm
Upper sieve	Standard: 15 TM6: 15
Lower sieve	Standard: 8 TM6: 8
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Canola

V-plates can be installed for tough stem conditions, as well as the serrated impeller wear strip kit. Close rotor cover plates, one segment at a time, to improve material flow onto the cleaning shoe.

Feederhouse drum position	Down
Feederhouse speed	400 rpm
Pre-concave types	6.5, 10 or 12x40 mm
Pre-concave rear filler plate	As needed only on corn models
Dis-awning plates	Opened
Intensive threshing segments	Not installed, use as needed
Concave gap	25 mm
Threshing cylinder speed range	High
Threshing cylinder speed	600 rpm
Concave filler plates	None installed
Rotor speed	800 rpm
Rotor cover plates	(1-2) closed, more as needed
Cleaning fan speed	1000 rpm
Upper sieve	Standard: 14 TM6: 14
Lower sieve	Standard: 6 TM6: 6
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	As needed

Recommended starting settings

Corn (dry)

Set concave gap to the diameter of the cob with the round bar main concave and 2-3mm over cob diameter when using an N18 large wire concave. Set corn head deck-plate gap to slightly over the stalk diameter.

Feederhouse drum position	Up
Feederhouse speed	350 rpm
Pre-concave types	19x40 mm or Round bar
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open
Intensive threshing segments	Not installed
Concave gap	28 mm
Threshing cylinder speed range	Low
Threshing cylinder speed	360 rpm
Concave filler plates	None installed
Rotor speed	400 rpm
Rotor cover plates	All open
Cleaning fan speed	1200 rpm
Upper sieve	Deep-tooth: 15 Standard: 18
Lower sieve	Deep-tooth: 14 Standard: 15
Chopper speed	Low
Stationary knives	Disengaged
Friction plate (TC, PC)	As needed

“High moisture” corn

Set concave gap to the diameter of the cob with the round bar main concave and 2-3mm over cob diameter when using an N18 large wire concave. Set corn head deck-plate gap to slightly over the stalk diameter.

Feederhouse drum position	Up
Feederhouse speed	420 rpm
Pre-concave types	19x40 mm or Round bar
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open
Intensive threshing segments	Not installed
Concave gap	28 mm
Threshing cylinder speed range	Low
Threshing cylinder speed	400 rpm
Concave filler plates	None installed
Rotor speed	450 rpm
Rotor cover plates	Open
Cleaning fan speed	1350 rpm
Upper sieve	Deep-tooth: 15 Standard: 18
Lower sieve	Deep-tooth: 14 Standard: 15
Chopper speed	Low
Stationary knives	Disengaged
Friction plate (TC, PC)	Engage as needed

Recommended starting settings

Edible beans

V-plates will need to be installed for most conditions when threshing below 400rpm. Slow threshing cylinder as necessary to achieve desired sample.

Feederhouse drum position	Up, down if in rocks
Feederhouse speed	380 rpm
Pre-concave types	6.5, 10, 12 or 19x40 mm or Round bar
Pre-concave rear filler plate	Not installed
Dis-awning plates	As needed
Intensive threshing segments	Not installed
Concave gap	25 mm
Threshing cylinder speed range	Low
Threshing cylinder speed	400 rpm
Concave filler plates	None installed
Rotor speed	500 rpm
Rotor cover plates	As needed
Cleaning fan speed	1200 rpm
Upper sieve	Deep-tooth: 9 Standard: 16 TM6: 16
Lower sieve	Deep-tooth: 2-3 Standard: 12 TM6: 12
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	As needed

Flax

Feederhouse drum position	Down
Feederhouse speed	420 rpm
Pre-concave types	6.5 or 10x40 mm
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open as needed
Intensive threshing segments	Not installed
Concave gap	10 mm
Threshing cylinder speed range	High
Threshing cylinder speed	550 rpm
Concave filler plates	None installed
Rotor speed	800 rpm
Rotor cover plates	(1-2) closed
Cleaning fan speed	850 rpm
Upper sieve	Standard: 10 TM6: 10
Lower sieve	Standard: 3 TM6: 3
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Recommended starting settings

Grass seed (fescue, rye, …)

Cleaning fan reduction pulley required to achieve optimal cleaning fan speed.

Feederhouse drum position	Up, down if in rocks
Feederhouse speed	420 rpm
Pre-concave types	6.5x40 mm keystock
Pre-concave rear filler plate	Installed
Dis-awning plates	Open, if possible
Intensive threshing segments	Installed as needed
Concave gap	35 mm
Threshing cylinder speed range	High
Threshing cylinder speed	650 rpm
Concave filler plates	(4-6) installed on N18 large wire concave - beginning at row #2
Rotor speed	750 rpm
Rotor cover plates	2 - 4 closed
Cleaning fan speed	650 rpm
Upper sieve	Standard: 15 TM6: 15
Lower sieve	Standard: 10 TM6: 10
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Lentils

V-plates will need to be installed for most conditions when threshing below 400rpm.

Feederhouse drum position	Up, down if in rocks
Feederhouse speed	380 rpm
Pre-concave types	10 or 12x40 mm
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open, close as needed
Intensive threshing segments	Not installed
Concave gap	25 mm
Threshing cylinder speed range	Low
Threshing cylinder speed	400 rpm
Concave filler plates	None installed
Rotor speed	500 rpm
Rotor cover plates	Open, close as needed
Cleaning fan speed	1200 rpm
Upper sieve	Standard: 16 TM6: 16
Lower sieve	Standard: 12 TM6: 12
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Recommended starting settings

Malting barley	
Feederhouse drum position	Down
Feederhouse speed	400 rpm
Pre-concave types	6.5, 10, or 12x40 mm
Pre-concave rear filler plate	Yes, only on corn models
Dis-awning plates	Closed, open as needed
Intensive threshing segments	Not installed
Concave gap	20 mm
Threshing cylinder speed range	High
Threshing cylinder speed	650 rpm
Concave filler plates	(3) installed on N18 large wire concave - beginning at row #2
Rotor speed	750 rpm
Rotor cover plates	Open, close as needed
Cleaning fan speed	1100 rpm
Upper sieve	Standard: 15 TM6: 15
Lower sieve	Standard: 9 TM6: 9
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged as needed

Milo	
Feederhouse drum position	Down
Feederhouse speed	380 rpm
Pre-concave types	10, 12, 19x40 mm or Round bar
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open, closed as needed
Intensive threshing segments	Not installed
Concave gap	15 mm
Threshing cylinder speed range	High
Threshing cylinder speed	550 rpm
Concave filler plates	None installed
Rotor speed	800 rpm
Rotor cover plates	Open
Cleaning fan speed	1100 rpm
Upper sieve	Deep tooth: 9 Standard: 15 TM6: 15
Lower sieve	Deep tooth: 0 - 2 Standard: 8 TM6: 8
Chopper speed	High
Stationary knives	Engaged 50% or 100%
Friction plate (TC, PC)	Engaged as needed

Recommended starting settings

Oats

Rotor cover plates can be closed (one segment at a time) in very dry conditions to improve material flow onto the cleaning shoe.

Feederhouse drum position	Down
Feederhouse speed	400 rpm
Pre-concave types	6.5, 10 or 12x40 mm
Pre-concave rear filler plate	Installed, only in corn models
Dis-awning plates	Open, close as needed
Intensive threshing segments	Not installed
Concave gap	16 mm
Threshing cylinder speed range	High
Threshing cylinder speed	800 rpm
Concave filler plates	(3) installed on N18 large wire concave - beginning at row #2
Rotor speed	900 rpm
Rotor cover plates	Open, close as needed
Cleaning fan speed	1000 rpm
Upper sieve	Standard: 15 TM6: 15
Lower sieve	Standard: 12 TM6: 12
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Peas

V-plates will need to be installed for most conditions when threshing below 400rpm. Install the serrated wear strip kit.
Note: do not install the serrated wear strips without the fixed serrated blade.

Feederhouse drum position	Up, down if in rocks
Feederhouse speed	380 rpm
Pre-concave types	10, 12, 19x40 mm or Round bar
Pre-concave rear filler plate	Not installed
Dis-awning plates	Close as needed
Intensive threshing segments	Not installed
Concave gap	25 mm
Threshing cylinder speed range	Low
Threshing cylinder speed	400 rpm
Concave filler plates	None installed
Rotor speed	500 rpm
Rotor cover plates	Open, close as needed
Cleaning fan speed	1200 rpm
Upper sieve	Standard: 16 TM6: 16
Lower sieve	Standard: 12 TM6: 12
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Recommended starting settings

Popcorn

Set concave gap to the diameter of the cob with the round bar main concave and 2-3mm over cob diameter when using an N18 large wire concave. The dis-awning plates can be closed in low throughput situations to help improve threshing performance.

Feederhouse drum position	Up
Feederhouse speed	300 rpm
Pre-concave types	19x40 mm or Round bar
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open
Intensive threshing segments	Not installed
Concave gap	19 mm
Threshing cylinder speed range	Low
Threshing cylinder speed	300 rpm
Concave filler plates	None installed
Rotor speed	400 rpm
Rotor cover plates	Open
Cleaning fan speed	1000 rpm
Upper sieve	Deep-tooth: 11 Standard: 15
Lower sieve	Deep-tooth: 10 Standard: 12
Chopper speed	Low
Stationary knives	Disengaged
Friction plate (TC, PC)	Engaged, as needed

Red and white clover

Cleaning fan reduction pulley required to achieve optimal cleaning fan speed.

Feederhouse drum position	Up, down if in rocks
Feederhouse speed	420 rpm
Pre-concave types	6.5 mm keystock
Pre-concave rear filler plate	Installed
Dis-awning plates	Closed
Intensive threshing segments	Installed, as needed
Concave gap	8 mm
Threshing cylinder speed range	High
Threshing cylinder speed	900 rpm
Concave filler plates	(8) installed on N18 large wire concave - beginning at row #2
Rotor speed	1000 rpm
Rotor cover plates	(2-4) closed
Cleaning fan speed	400 rpm
Upper sieve	Standard: 4 TM6: 4
Lower sieve	Standard: 2 TM6: 2
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Recommended starting settings

Rice – rasp bar threshing cylinder

Removing every other wire from the 10mm wire grates may improve pre-separation performance.

Feederhouse drum position	Down
Feederhouse speed	400 rpm
Pre-concave types	10 or 12x40 mm
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open
Intensive threshing segments	Not installed
Concave gap	18 mm
Threshing cylinder speed range	High
Threshing cylinder speed	700 rpm
Concave filler plates	None installed
Rotor speed	960 rpm
Rotor cover plates	None
Cleaning fan speed	1100 rpm
Upper sieve	Deep-tooth: 9 Standard: 15 TM6: 15
Lower sieve	Deep-tooth: 3 Standard: 15 TM6: 15
Chopper speed	High
Stationary knives	Not engaged
Friction plate (TC, PC)	Not engaged

Rice – spike-tooth threshing cylinder

The spike-tooth version pre-concave does not have dis-awning plates or interchangeable pre-concave grates and may require the fixed “rice” pre-concave grate to be covered entirely for soybeans and milo.

Feederhouse drum position	Down
Feederhouse speed	400 rpm
Pre-concave types	Not available
Pre-concave rear filler plate	Not installed
Dis-awning plates	Not available
Intensive threshing segments	Not installed
Concave gap	18 mm
Threshing cylinder speed range	High
Threshing cylinder speed	650 rpm
Concave filler plates	Not available
Rotor speed	960 rpm
Rotor cover plates	None
Cleaning fan speed	1100 rpm
Upper sieve	Deep-tooth: 9 Standard: 18 TM6: 18
Lower sieve	Deep-tooth: 3 Standard: 16 TM6: 16
Chopper speed	High
Stationary knives	Not engaged
Friction plate (TC, PC)	Not engaged

Recommended starting settings

Soybeans

19mm smooth corn grates or round bar grates can be used for easy-to-thresh conditions, but may require closing the dis-awning plates.

Feederhouse drum position	Up, down if in rocks
Feederhouse speed	380 rpm
Pre-concave types	10, 12 or 19x40 mm or Round bar
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open, close as needed
Intensive threshing segments	Not installed
Concave gap	22 mm
Threshing cylinder speed range	High
Threshing cylinder speed	600 rpm
Concave filler plates	None installed
Rotor speed	700 rpm
Rotor cover plates	As needed
Cleaning fan speed	1150 rpm
Upper sieve	Deep-tooth: 9 Standard: 15 TM6: 15
Lower sieve	Deep-tooth: 0 - 2 Standard: 10 TM6: 10
Chopper speed	High
Stationary knives	Engaged 100%, 50% optional
Friction plate (TC, PC)	As needed

Soybeans (“green-stem”)

V-plates can be installed for tough stem conditions, as well as the serrated impeller wear strip kit.

Feederhouse drum position	Up, down if in rocks
Feederhouse speed	400 rpm
Pre-concave types	10 or 12x40 mm
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open, closed as needed
Intensive threshing segments	Not installed
Concave gap	19 mm
Threshing cylinder speed range	High
Threshing cylinder speed	650 rpm
Concave filler plates	None installed
Rotor speed	750 rpm
Rotor cover plates	Open, close as needed
Cleaning fan speed	1200 rpm
Upper sieve	Deep-tooth: 9 Standard: 15 TM6: 15
Lower sieve	Deep-tooth: 0 - 2 Standard: 10 TM6: 10
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	As needed

Recommended starting settings

Sunflowers

V-plates will need to be installed for most conditions, as well as the serrated impeller wear strip kit.

Feederhouse drum position	Up
Feederhouse speed	350 rpm
Pre-concave types	19x40 mm or Round bar
Pre-concave rear filler plate	Not installed
Dis-awning plates	Open
Intensive threshing segments	Not installed
Concave gap	27 mm
Threshing cylinder speed range	Low
Threshing cylinder speed	400 rpm
Concave filler plates	None installed
Rotor speed	640 rpm
Rotor cover plates	1 - 2 closed
Cleaning fan speed	1000 rpm
Upper sieve	Deep-tooth: 3 Standard: 14 TM6: 14
Lower sieve	Deep-tooth: 0 - 3 Standard: 10 TM6: 10
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	Engaged, as needed

Wheat

For high straw quality and very dry conditions, refrain from using the intensive threshing segments.

Feederhouse drum position	Up or Down
Feederhouse speed	400 rpm
Pre-concave types	6.5, 10 or 12x40 mm
Pre-concave rear filler plate	Yes (only on corn models)
Dis-awning plates	Open, close as needed
Intensive threshing segments	Not installed, use as needed
Concave gap	12 mm
Threshing cylinder speed range	High
Threshing cylinder speed	750 rpm
Concave filler plates	(3) installed on N18 large wire concave - beginning at row #2
Rotor speed	850 rpm
Rotor cover plates	Open, close as needed
Cleaning fan speed	1100 rpm
Upper sieve	Deep-tooth: 9 Standard: 15 TM6: 15
Lower sieve	Deep-tooth: 0 - 2 Standard: 9 TM6: 9
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	As needed

Recommended starting settings

Wheat (stripper header)

With less material being brought into the machine, installing filler strips, pre-concave cover plate and rotor covers are usually needed for high threshing quality.

Feederhouse drum position	Down
Feederhouse speed	400 rpm
Pre-concave types	6.5, 10 or 12x40 mm
Pre-concave rear filler plate	Installed
Dis-awning plates	Closed
Intensive threshing segments	Not installed, use as needed
Concave gap	10 mm
Threshing cylinder speed range	High
Threshing cylinder speed	800 rpm
Concave filler plates	Minimum (3) installed on N18 large wire concave - beginning at row #2
Rotor speed	900 rpm
Rotor cover plates	(2) closed
Cleaning fan speed	1100 rpm
Upper sieve	Deep-tooth: 9 Standard: 15 TM6: 15
Lower sieve	Deep-tooth: 0 - 2 Standard: 9 TM6: 9
Chopper speed	High
Stationary knives	Engaged 100%
Friction plate (TC, PC)	As needed