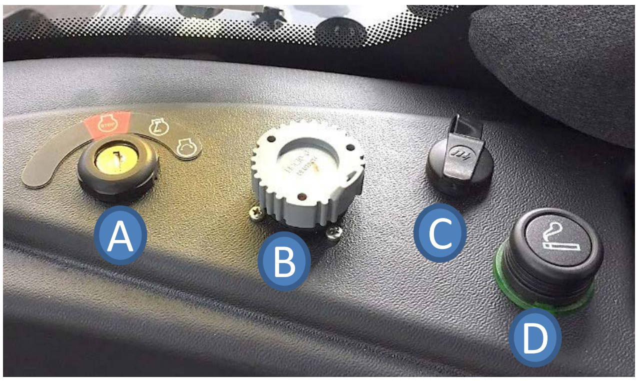
FR Forage Cruiser

Operators Guide

Contents

In Cab Controls

Start Module



The start module is located to the back right of the operator's seat:

A. Ignition key
B. Diagnostic port
C. 12 volts DC socket
D. Cigarette lighter

CommandGrip™ Handle

The New Holland FR Forager Cruiser is fitted with the CommandGrip™ handle which is the main interface in controlling the FR Forage Cruiser.

In Cab Controls

CommandGrip™ Handle

SHIFT BUTTON:
Same function as the shift button located on the floor. Button is used for the second function on certain controls.

DRIVE UNLOCK BUTTON:
To set the forage harvester in motion from standstill. Press the button and move the lever forward or backward in the desired direction.

The handle is force based and speed is independent of its position.
The handle will always return to the centre position.

In Cab Controls

CommandGrip™ Handle

QUICK STOP:
Quick disengagement of the feedrolls and attachment

FEEDROLL AND HEADER DRIVE: Engagement and disengagement of the feedrolls and header drive.

- Press upper part twice to engage
- Press lower part to disengage
- Press and hold the lower part to reverse both feedrolls and header

POWERCRUISE™ AND ROW GUIDANCE ACTIVATION:

- Activation of the PowerCruise™ if traveling above 1Kph.
- To memorise a speed, press and hold for 2 sec.
- To adjust the set speed press the button, release the handle, press and hold while pushing the forward to increase the setpoint or backward to reduce the setpoint.
- Movement of the handle will deactivate the PowerCruise™

RESUME BUTTON:

- Press and release will allow the header to lower to the pre-set height
- Press and release twice will raise the header to the maximum height
- To save the header position or ground pressure, adjust the height manually followed by pressing and holding the resume button for two seconds.

In Cab Controls

CommandGrip™ Handle

SPOUT SET POINT SWITCH:
Manually move the spout into the desired position followed by pressing and holding either button for 2 sec.

THIRD SPOUT SET POINT:

- Used for moving to the spout to the rear position for rear filling. Move the spout manually then press and hold the button for 2 sec to save
- Use of the button in combination with the shift button will bring the spout to the home position (position for road transport)

HEADER HEIGHT AND LATERAL FLOTATION:

- Use the upper and lower part of the switch to raise and lower the header (Used in combination with the shift button will operate the rear hydraulics)
- Use the left and right part of the button to adjust the lateral flotation either clockwise or anti-clockwise

SPOUT DEFLECTOR AND ROTATION (SPOUT RAISE AND LOWER):

- Use the upper and lower part of the switch to raise and lower the spout deflector (Used in combination with the shift button will raise and lower the spout)
- Use the left and right part of the switch to rotate the spout

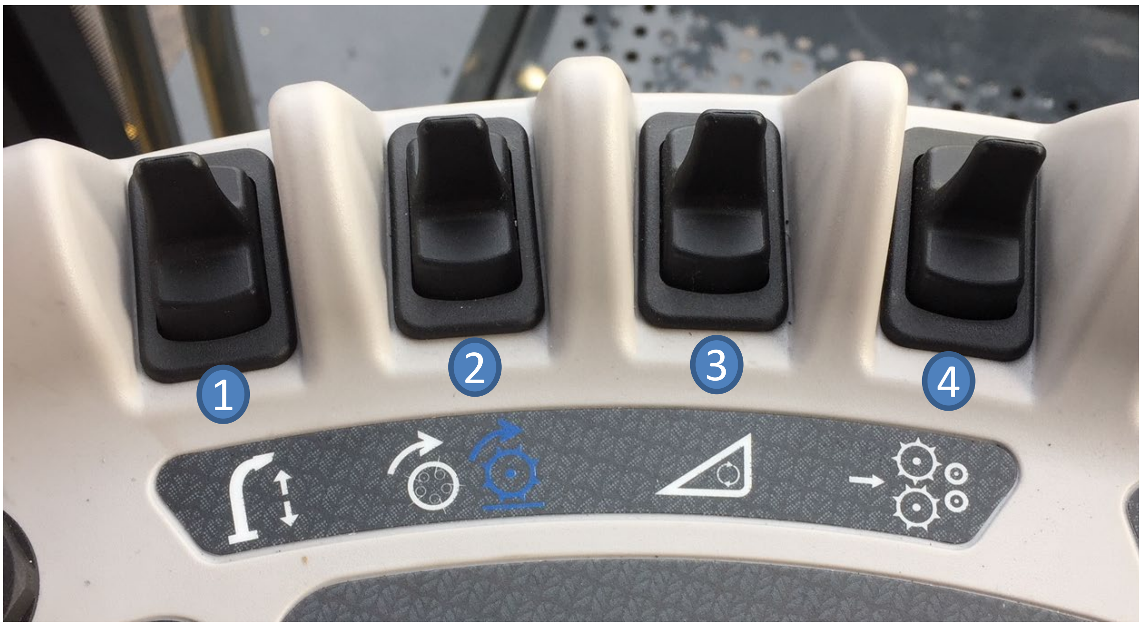
In Cab Controls

1. Cutterhead engagement
   - To engage the cutterhead providing that the machine is in field mode.
   - Push down on the yellow button and pull up the black collar.
   - To disengage, simply press down on the yellow button
   - After stopping the cutterhead the main clutch may require some time to cool down as displayed on the IntelliView™ screen
2. Emergency stop
   - This completely stops the machine including header,feedrolls, engine and activates the park brake
3. Cutterhead reverse
   - Select the cutterhead reverse function and engage the cutterhead using the main cutterhead engagement switch

4. Attachment height memory
   - 1 and 2 header height setting
   - 3 ground pressure mode (Use with grass pickup)
5. Header width correction
   - Function is used if the full header width is not used and to help maintain field area accuracy.
   - Each pulse increases/decreases the working area by 1 metre
   - Press and hold the – button and will set header width to zero
   - Press and hold + will set the header to maximum width
   - Headland routine restores full width
6. Engine speed control buttons
   - These buttons are used to increase and decrease the engine rpm setting

In Cab Controls

Right Hand Module



1. Spout raise and lower switch
2. Speed adjustment switch
   - Tine reel speed adjustment (Grass pickup)
   - Speed adjustment of the vertical feed rotors (Willow header)
   - In combination with the shift button, speed adjustment of the 5th feedroll (Grain and maize header)
3. Header speed adjustment switch (Double drive only)
   - Adjust the auger speed on a grass pickup
   - Adjust the speed of the knives and auger on grain header
   - Adjust drum speed on maize header
   - Adjust header speed on direct cut header
   - Adjust speed of saw blades on willow header
4. Length of Cut (LOC) Adjustment

In Cab Controls

Right Hand Module

5. Crop processor opening
6. Front hydraulics
   - Folding or unfolding of maize headers
   - Raise and lower the cover on the direct cut header
   - Raise and lower the roller windguard and auger on the grass pickup
   - In combination with the shift button, the folding and unfolding of the gauge wheels on the grass pickup
   - Move the reel forward or backward on the grain header
7. Autoguidance offset correction
8. High flow hydraulics
   - Speed adjustment of the upper feedroll found in a willow header
   - Change the reel speed on a grain header
   - In combination with the shift button, oppertion of the high flow 2 function (if equipped)

In Cab Controls

Right Hand Module

ROAD MODE ACTIVATION:
Activation of road/field mode.
Road mode: engine speed is controlled automatically and certain functions are restricted
Field mode: used when operating in the field. Normal functions are active

ADDITIVE ACTIVATION: Activation of the additive application system. Flow rate to be adjusted through the monitor

AUTO GUIDANCE:
Activation of the autoguidance system

REEL SPEED SYNCHRONIZATION:
Reel speed synchronization used on grass pickup
ON 1: Speed offset 1
ON 2: Speed offset 2
OFF: Fixed speed

CONCAVE DROP DOOR:
Remote opening of the hydraulic drop door in the transition channel. Only available when the engine is off

4WD/TERALOCK ACTIVATION:
Activation/ deactivation of the 4WD or TerraLock™ (HD 4WD)
TerraLock™ Only
1st push: TerraLock™ Activation
2nd push: Permanent 4WD
3rd push: 4WD off
Activation/deactivation angle to be set through monitor

In Cab Controls

Right Hand Module

1. Spout deflector offset
    - % of default value
2. IntelliFill™ Enable/ Disable
3. Trailer fill degree
    - ↑ % Value (Higher)
    - ↓ % Value (Lower)
4. Trailer memory
    - Use in the case of multiple design of trailer
    - Select/ unselect position 1
    - Select/ unselect position 2
    - Select/ unselect position 3 (Press 1+2)

Engine Control

PowerCruise™ II

This feature allows the operator to operate the machine in an efficient mannor.

In road mode:
The engine is operated at the lowest possible speed whilst maintaining tractive effort. Engine rpm ranges between **1200-1800rpm.**

In field mode (Full load crop conditions):
Automatically adjusts the engine and ground speed in order to maintain maximum capacity

In field mode (Partial load crop conditions):
Automatically controls engine speed to maintain optimum fuel consumption level.

In field mode (Headland operation):
During headland operation the engine rpm will be reduced to 1700rpm whilst the header is in the raised position. When the header is lowered the engine rpm will increase to a value depending on what ECO mode is active.

PowerCruise™ II Sensitivity
The PowerCruise™ II sensitivity can be adjusted through the monitor. The system sensitivity may require adjustment depending on crop conditions especially and level of variation in crop yield through a field.

NOTE: It is recommended that the forward set speed is set 1.5-2 km/h above normal forward speed. Failure to do so may cause the system to overreact.

Engine Control

ECO mode

The FR Forage Cruiser has a function called ECO mode. The purpose of this system is to reduce fuel consumption in the circumstance that the full engine power is not required. ECO mode adjusts the engine RPM based on engine load.

When using ECO mode the engine rpm will not go below the PowerCruise^{TM} II engine rpm setting

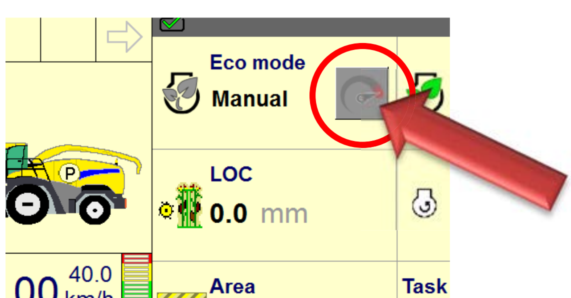
ECO Mode 1: (Default)
Engine rpm ranges between **1700-1850rpm**.

ECO Mode 2:
Engine rpm ranges between **1950-2100rpm**
In certain conditions it maybe necessary to run in ECO mode 2 in order to maintain cutterhead and blower speed such as grass with high sugar content.

ECO Mode OFF:
Engine rpm is fixed to 2100rpm

ECO mode selection

1. Press on the "engine throttle up" button. This will bring the engine from low idle to ECO mode 1
2. Press on the "engine throttle up" button again to advance to ECO mode 2. Press "engine throttle down" to revert back to ECO mode 1.
3. To turn off ECO mode press the button on the screen as displayed below.



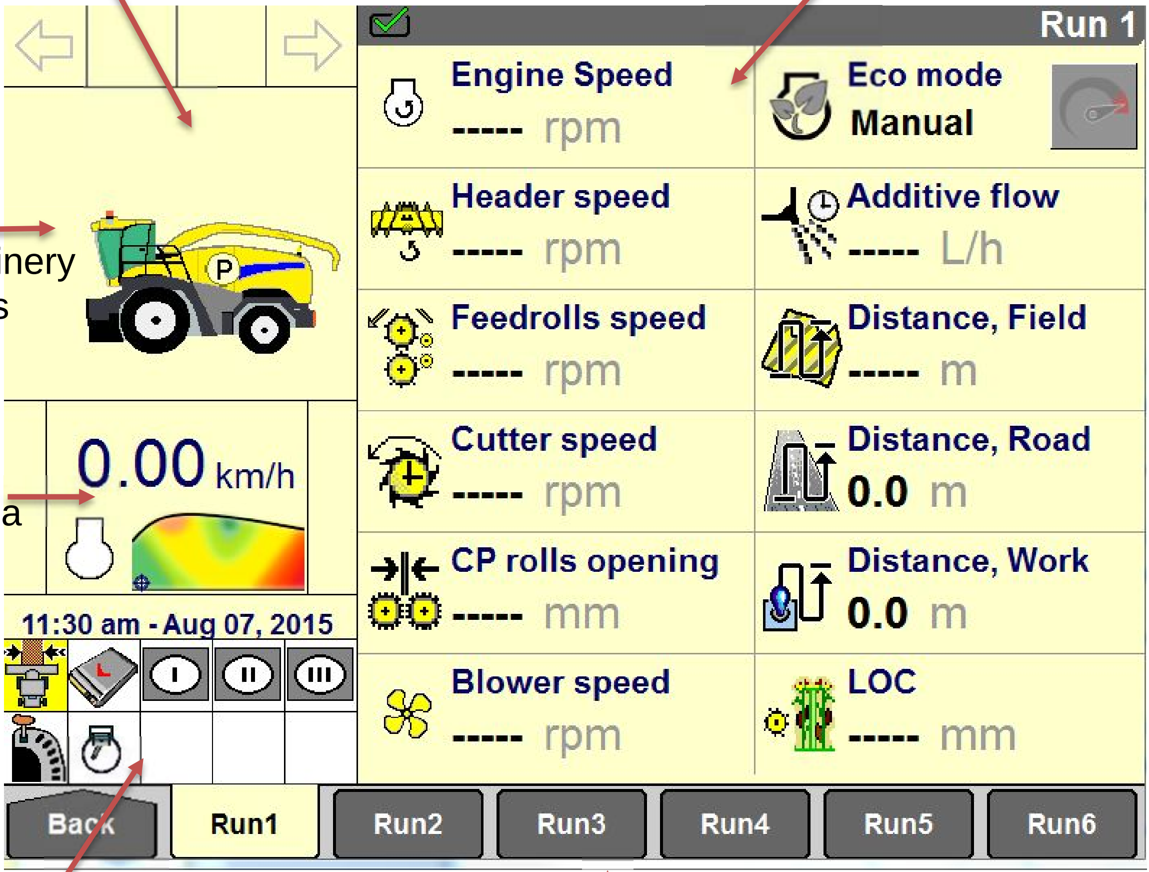
IntelliView^{TM} IV Screen

Info Area

Screen

Machinery Status

Info area



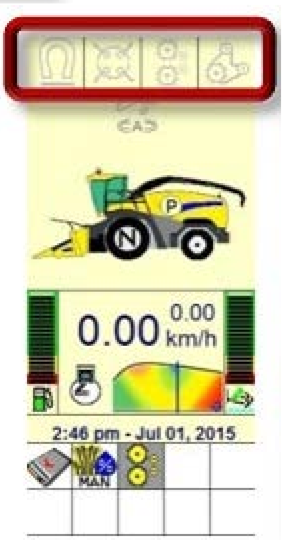
Info and warning area

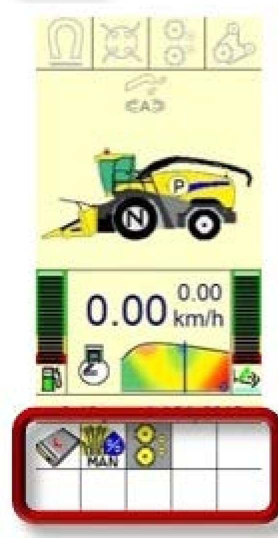
Active buttons

Info and Alarm / Warning Area

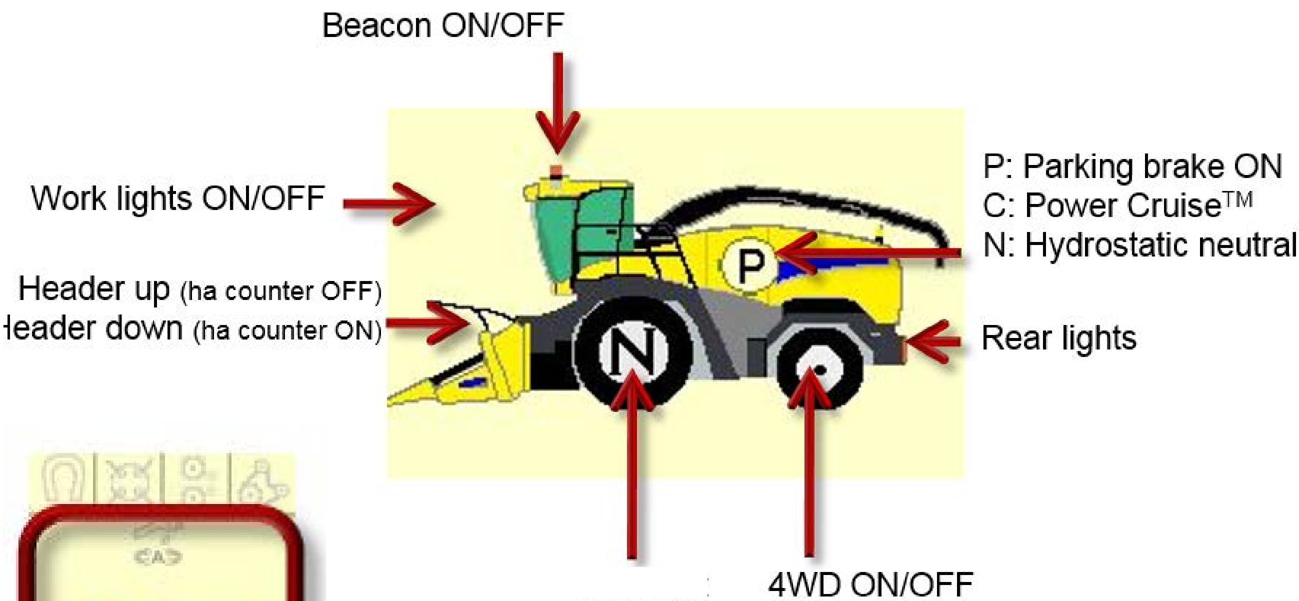
- Main drive - forwards
- Main drive - reverse
- Feedrolls - forwards
- Feedrolls - reverse
- Reel - forwards
- Reel - auto
- Reel - reverse
- Metaloc™ - ON
- Metaloc™ - OFF
- Clutch cool down
- Auto greasing active

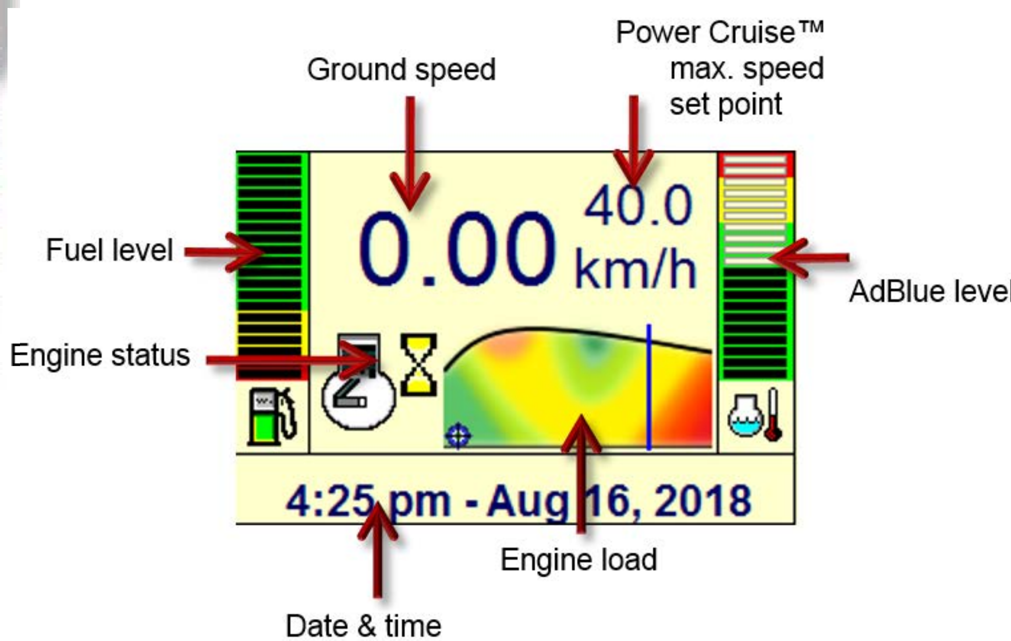
- Auger speed
- Reel speed
- Feedrolls speed
- Cutterhead speed
- Header speed
- Service door open
- Spout not home
- Seat switch
- HA counting
- Metaloc™
- Greasing obstruction
- Oil filter / level



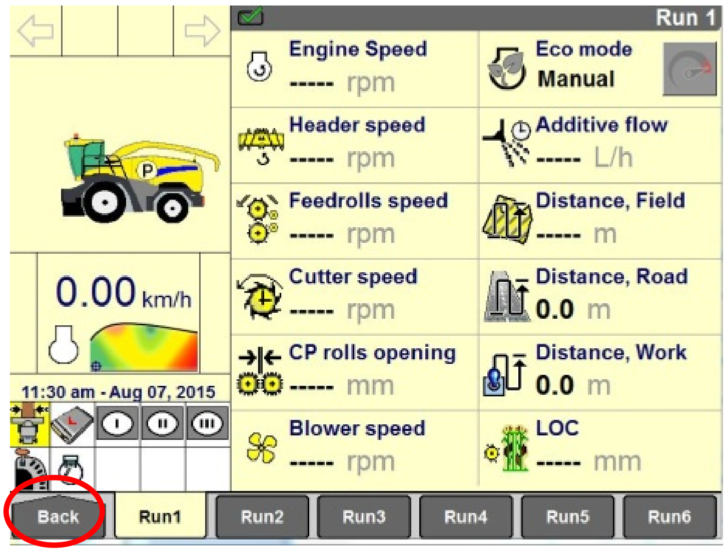


Machinery Status



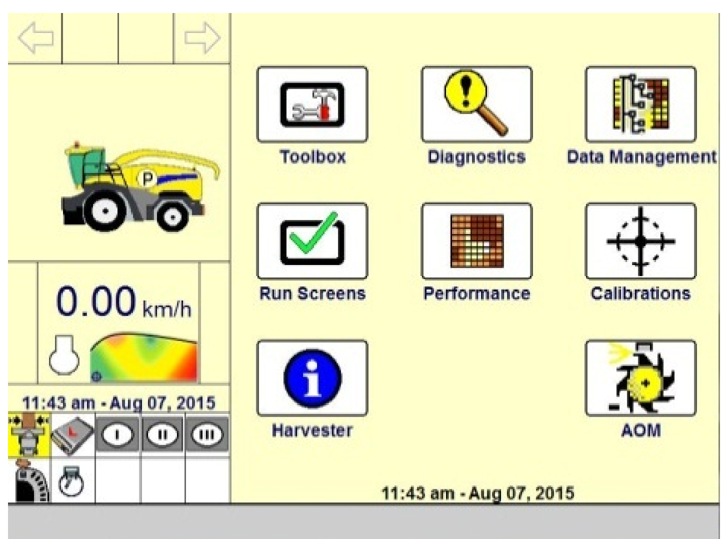


Home menu

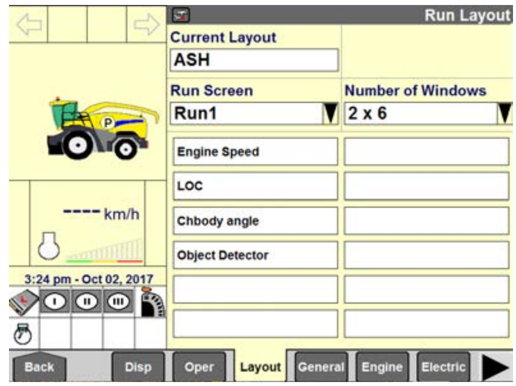


Select “Back”

- **Toolbox**: Configurations
- **Diagnostics**: Trouble shooting
- **Data Management**: Harvest data
- **Run Screens**: Operating screens
- **Performance**: Field/crop setup, summary
- **Calibrations**: Harvester calibrations
- **Harvester**: Harvester data overview
- **AOM**: Adjust-O-Matic™ system

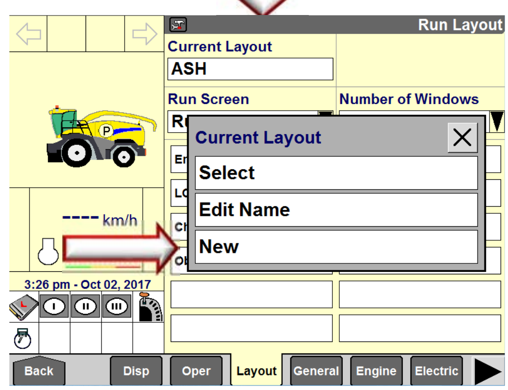


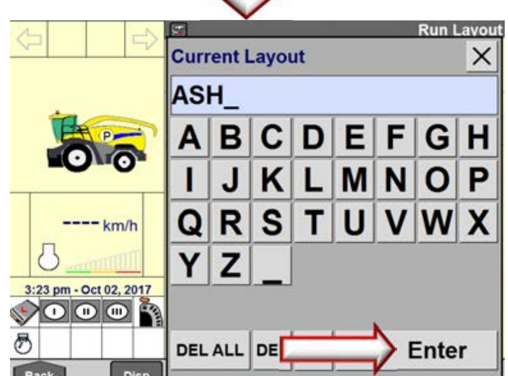
Add/Change Run Screen Information



1. Select “Back - Toolbox - Layout”
2. Select the “Current Layout” field
3. Select or create new “Current Layout”
4. To create “New” layout, write name and press “Enter”

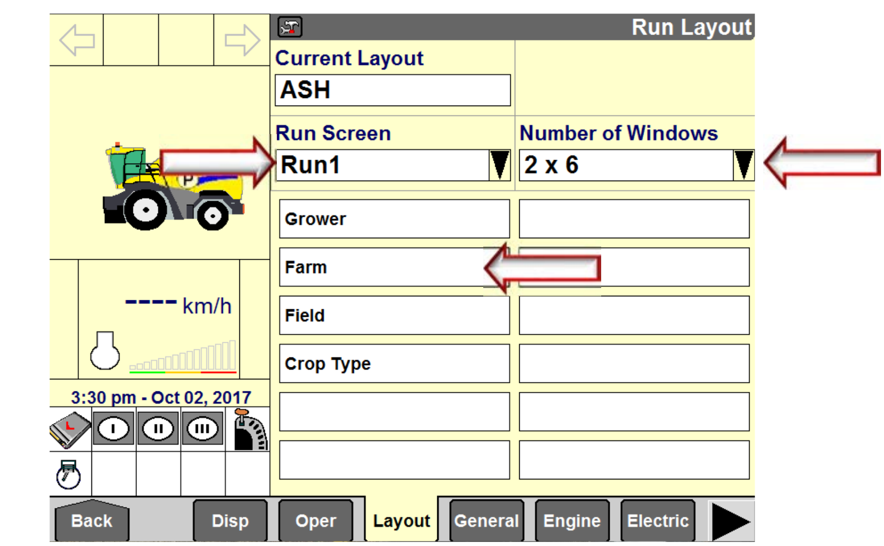
Note: It is not possible to change the screen layout when the current layout is set to “Default”

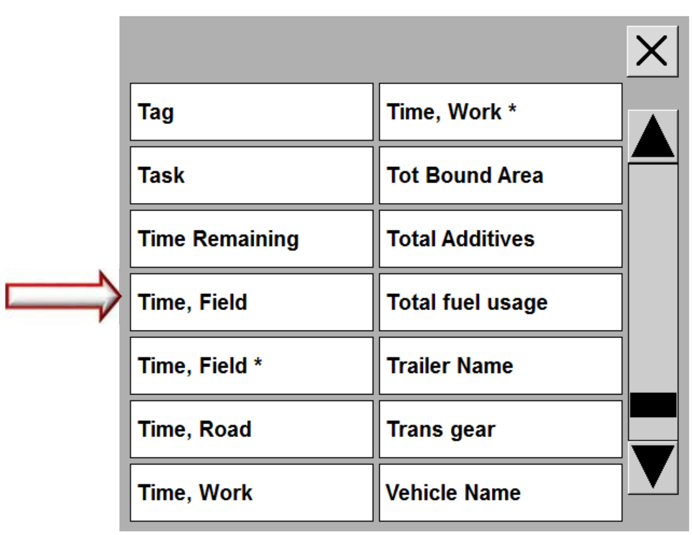




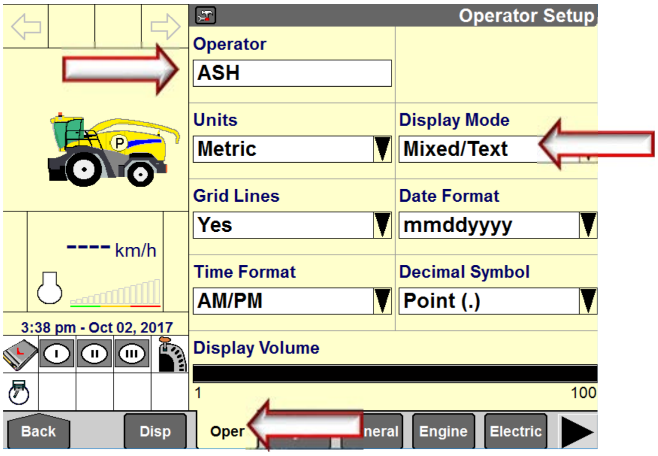
Add/Change Run Screen Info

1. Select desired “Run Screen” which you want to change
2. Select “Number of Windows” for to selected “Run Screen”
   - First digit: amount of columns
   - Second digit: amount of rows
3. Select field which has to be changed
4. Select input data

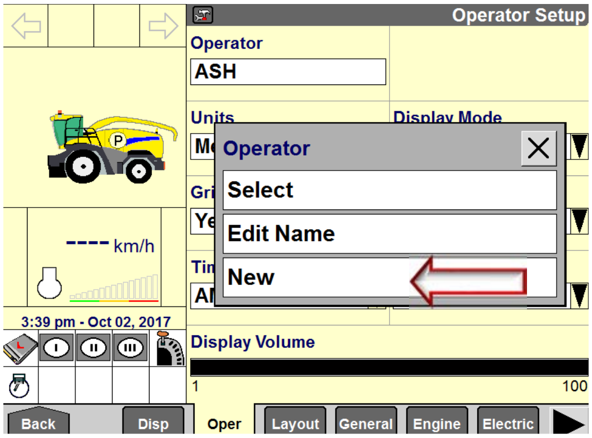


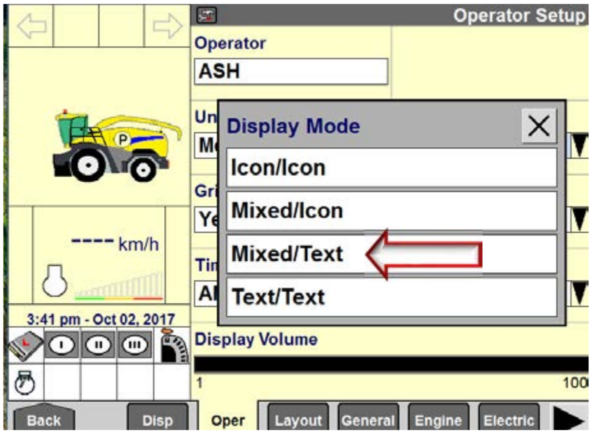


Change Display Mode

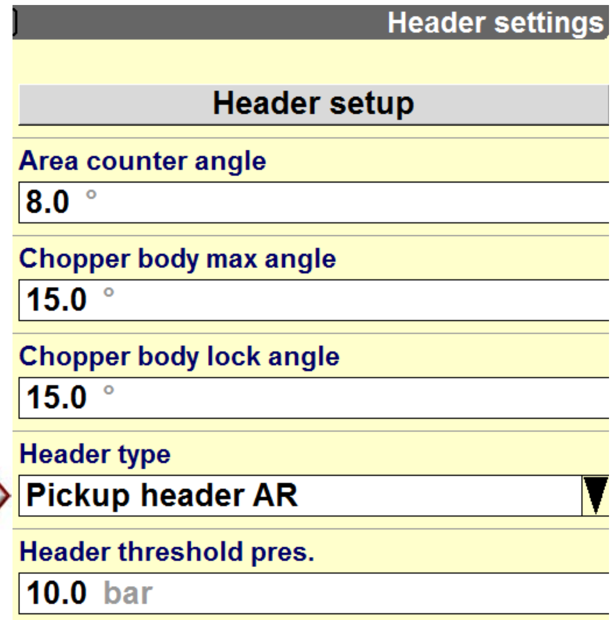


1. Select “Back - Toolbox – Operator”
2. Select “Display Mode”
    - Icon/Icon
    - Mixed/Icon
    - Mixed/Text
    - Text/Text
        - “Display Mode” can be changed by any “Operator”



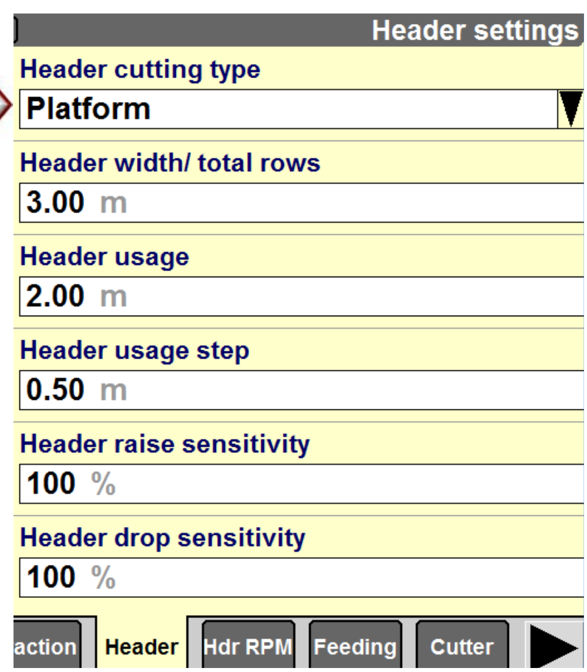


Header Configuration



1. Select “Back - Toolbox - Header”
2. Check and if required set the correct parameters for the current header
3. Header cutting type:
    1. In case of using a pick-up choose: Plattform
    2. In case of using a maize header choose: Row

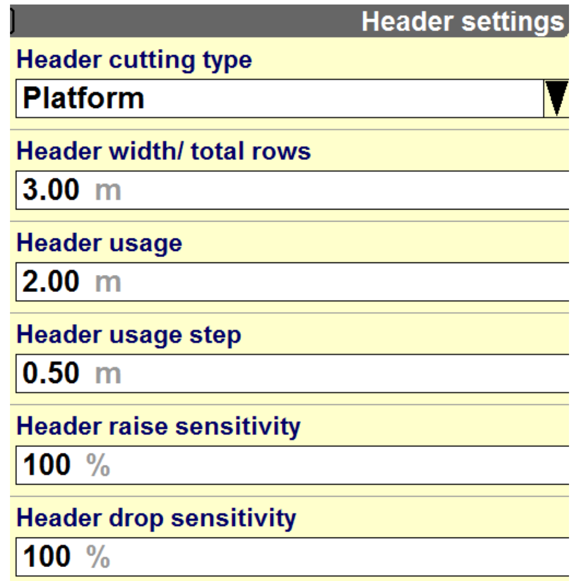
Note: If a header is connected the forage harvester detects the type of the header

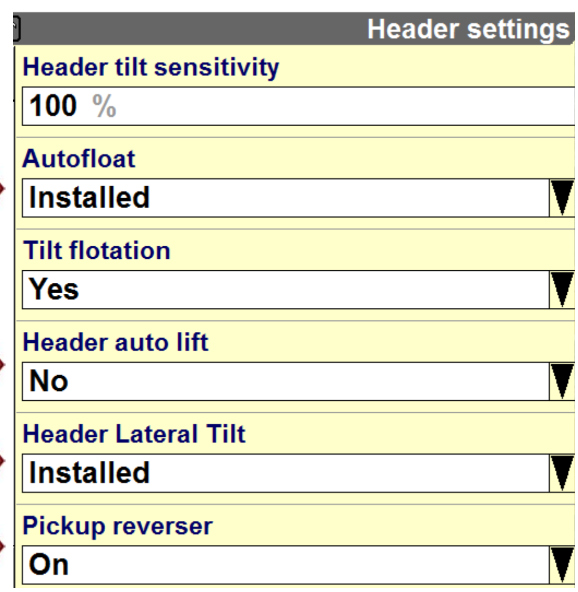


Header Configuration

1. Select “Back - Toolbox - Header”
2. Set the correct parameters for the current header
    1. “Header width”:
        - ✓ Header width/total rows
    2. “Autofloat” installed:
        - ✓ For headers with mobile skids/sensors
    3. “Header auto lift”:
        - ✓ The header will raise when driving backwards
    4. “Header lateral tilt” installed:
        - ✓ For harvesters with hydraulic lateral float
    5. Pickup reverser

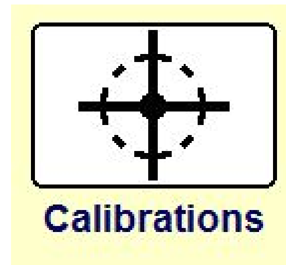
Note: With “HHC Ht Sens” and “HHC Tilt Sens” the system reaction agressiveness can be adjusted (HHC needs to be active)

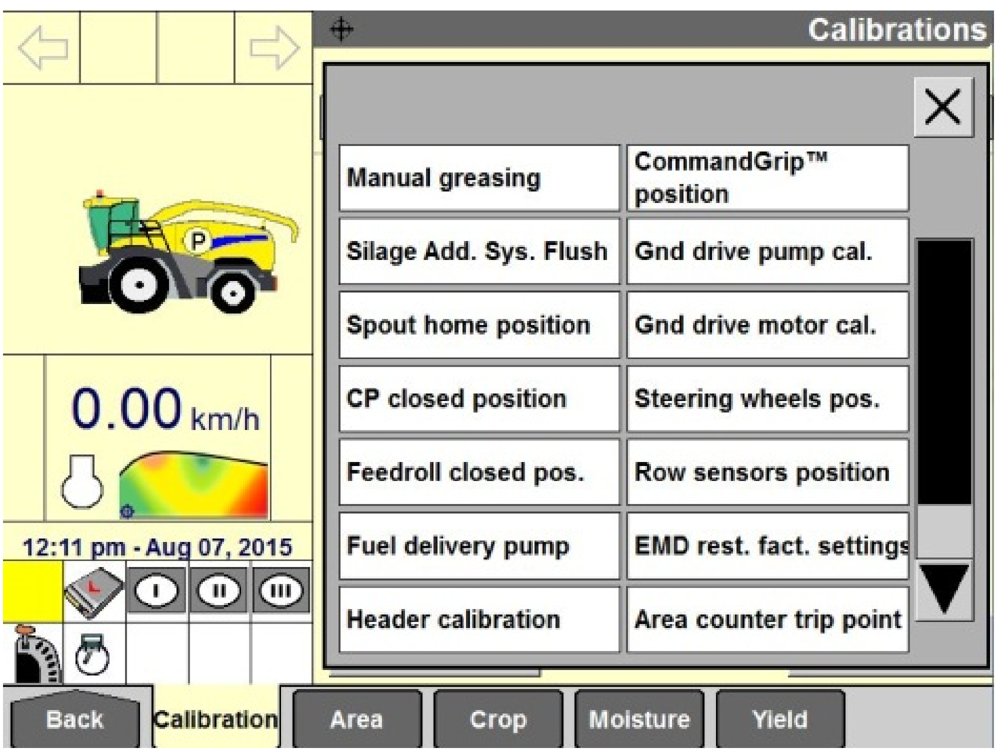




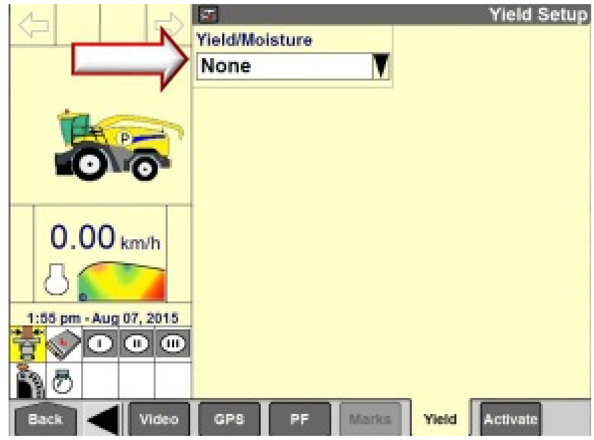
Header Calibration

1. Select “Back - Calibrations”
2. Select “Calibration”
3. Select “Header Calibration”
   - Follow the instructions on the monitor

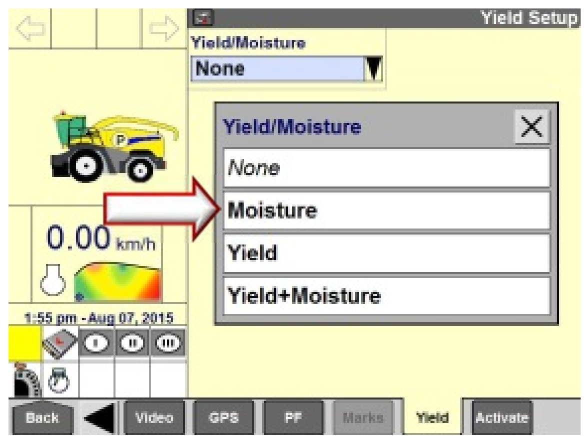


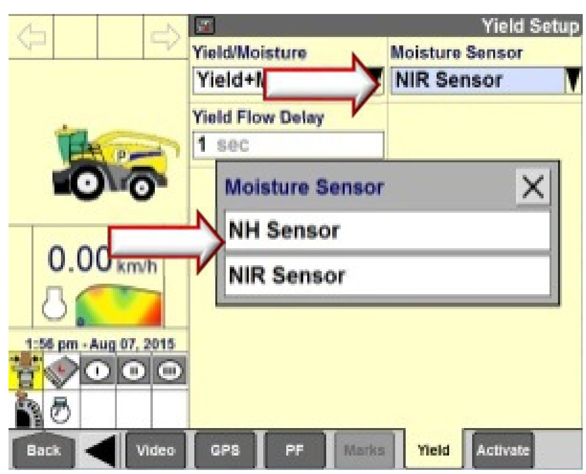


Moisture Calibration



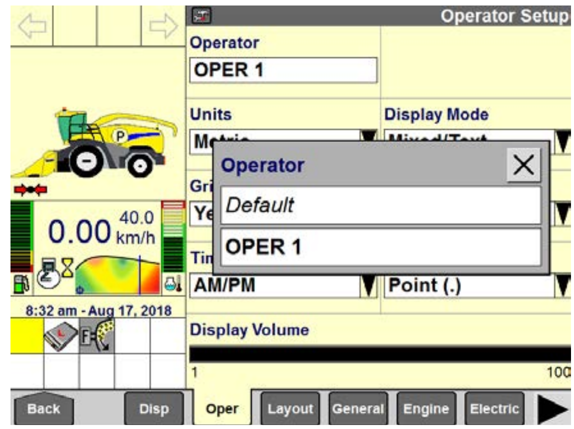
1. Select “Back-Toolbox-Yield”
2. Select the type of calibration (e.g. Yield + Moisture)
3. Select “Moisture Sensor”
4. Select the correct moisture sensor, “NIR Sensor” or “NH Sensor”

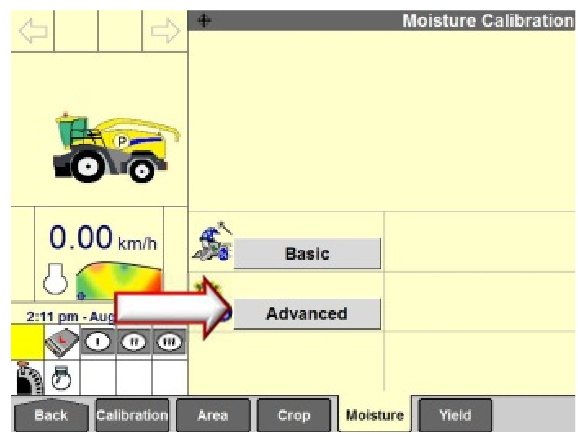


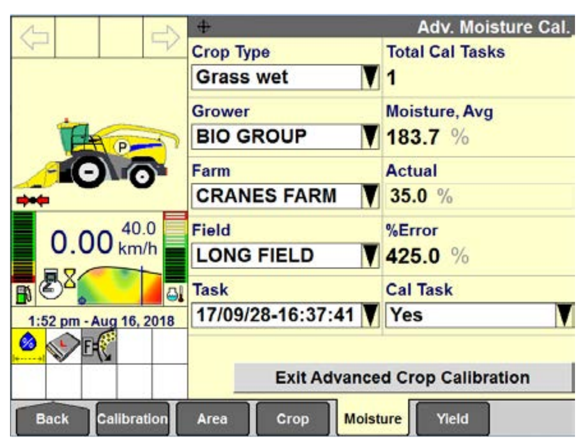


Moisture Calibration

1. Confirm that a new operator has been set in the “OPER” tab in the toolbox before proceeding
2. Select “Back”
3. Select “Calibrations-Moisture”
4. Select “Advance”
5. Select and enter the data as used to create the calibration task:
    1. Crop Type
    2. Grower
    3. Farm
    4. Field
    5. Task
6. Operate the machine and harvest at least 10 to 30 tons or 5 trailers





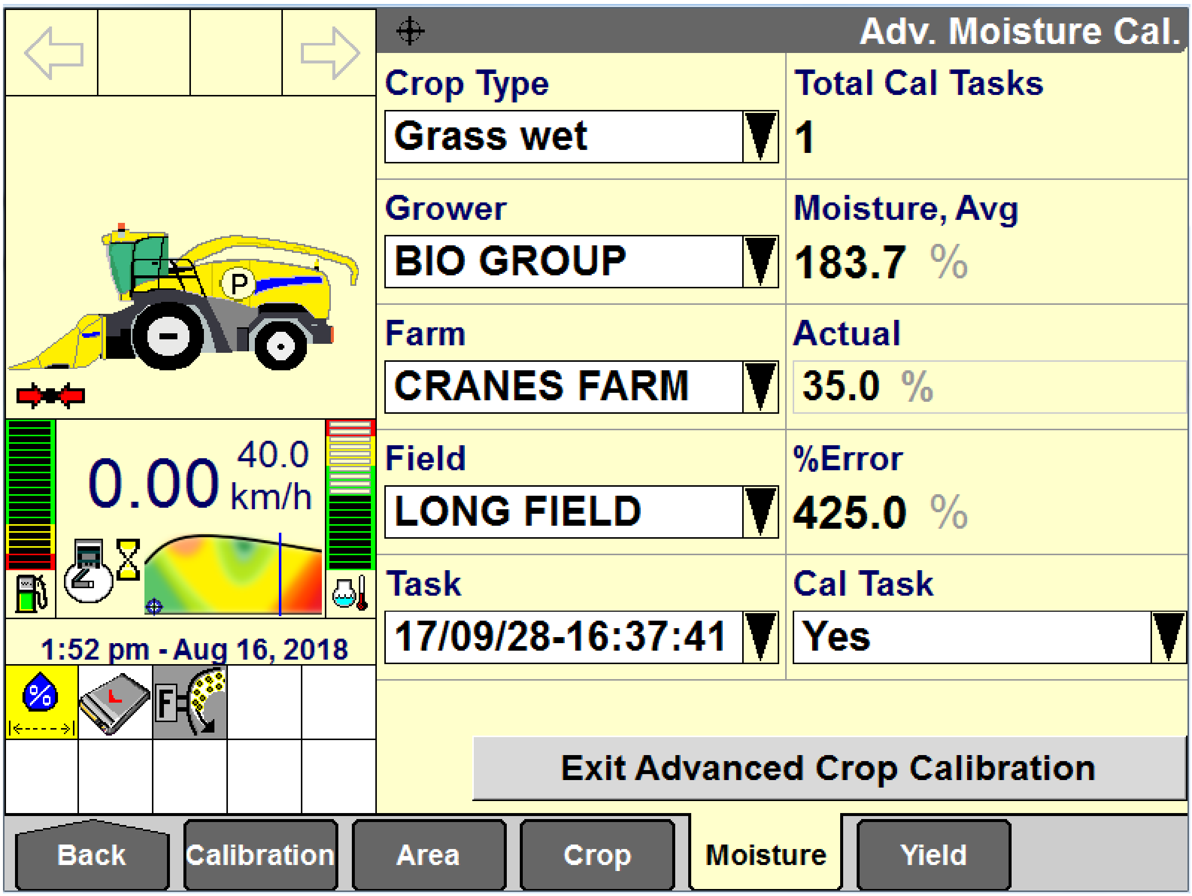


Moisture Calibration

7. After harvesting the 5 trailers take a sample from the load and measure the moisture

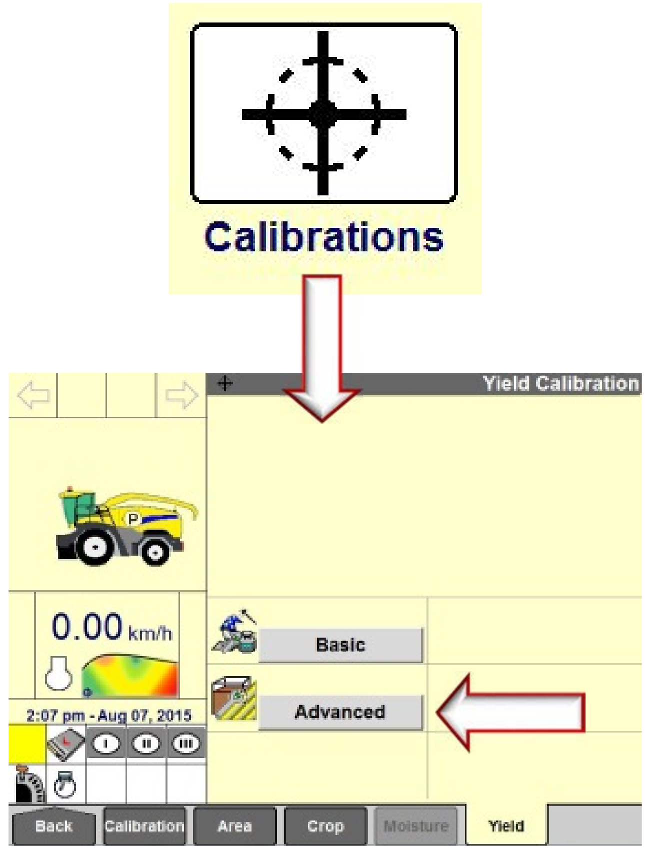
Note: The new value is limited between -5% and +8% of the replaced value

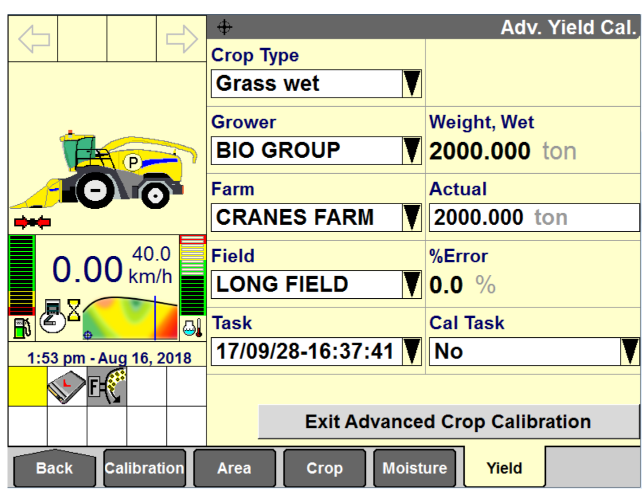
8. Select “Actual” and enter the measured moisture
9. Select “Cal task”
10. Choose “Yes” to use this task for calibration
11. Select “OK” to complete calibration



Yield Calibration

1. Select “Back”
2. Select “Calibrations-Yield”
3. Select “Advance”
4. Select and enter the data as used to create the calibration task:
    1. - Crop Type
    2. - Grower
    3. - Farm
    4. - Field
    5. - Task



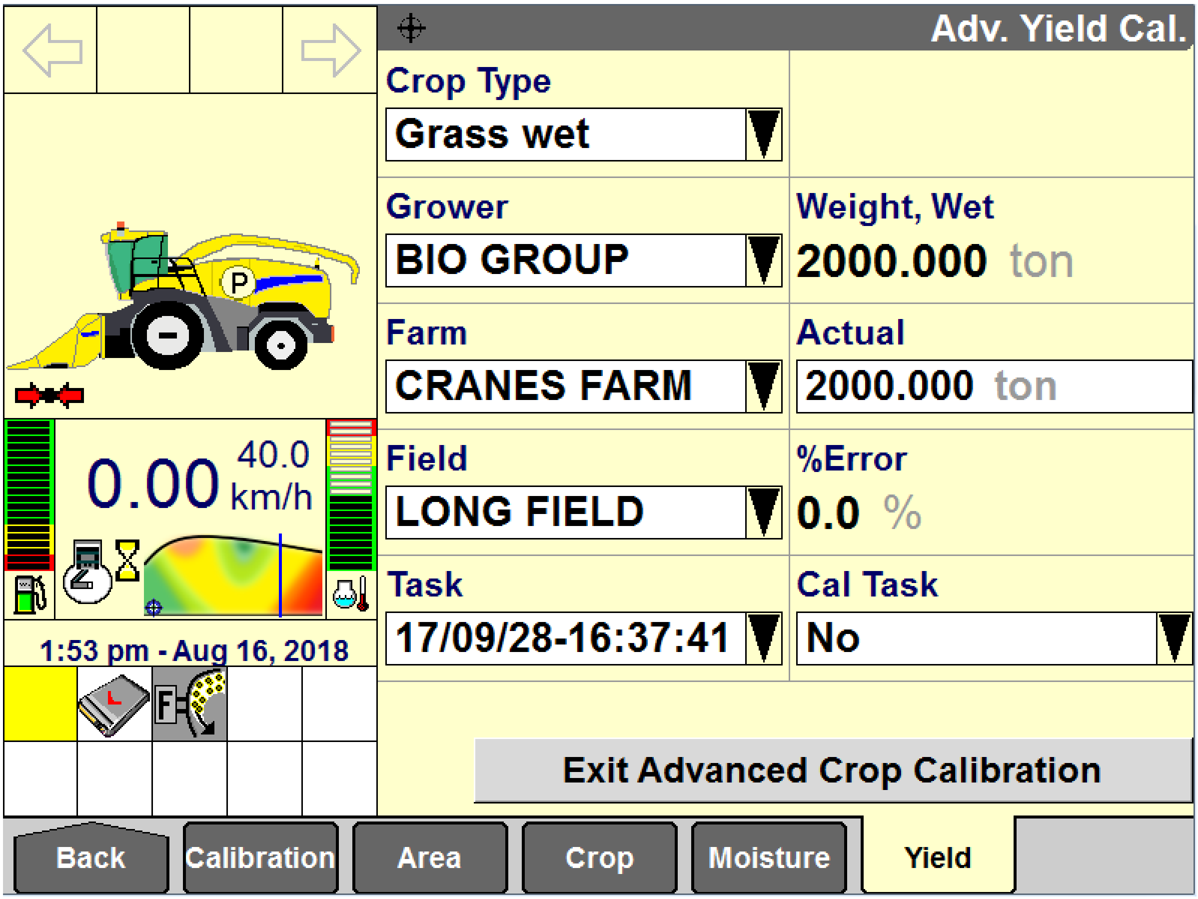


Yield Calibration

5. Select the “Actual” field and enter the measured yield value

Note: The new value is limited between -5% and +8% of the replaced value

6. Select “Cal task”
7. Choose “Yes” to use this task for calibration
8. Select “OK” to complete calibration

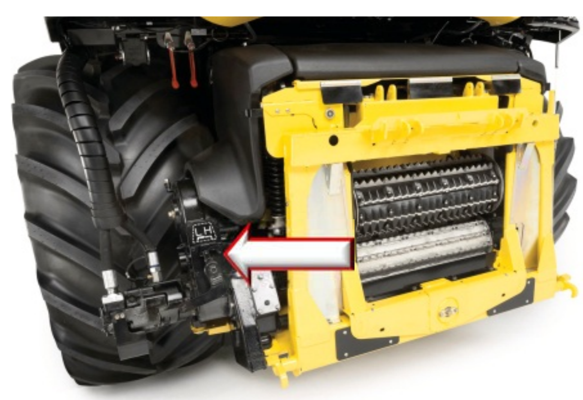


Length of Cut (LOC)

Cutting length (mm)

Numbers of knives	2 x 20	2 x 16	2 x 12	2 x 10	2 x 8	2 x 6	2 x 4
LOC - Low	2-5,5	3 - 6	4 – 9	4-11	6 - 13	8 - 18	12 - 26
LOC - High	6-13	7 - 16	10 - 22	12-26	14 -33	19 - 44	28 - 66

- When changing the Hydroloc™ gearbox range:
  - ✓ Units with double drive: automatic attachment speed adjustment
  - ✓ Units with single drive: requirement to compensate the attachment drivelines manually
- To adjust the length of cut, use the “Cutting length” switch on the right-hand module
  - The monitor screen shows the desired length of cut



Header synchronisation

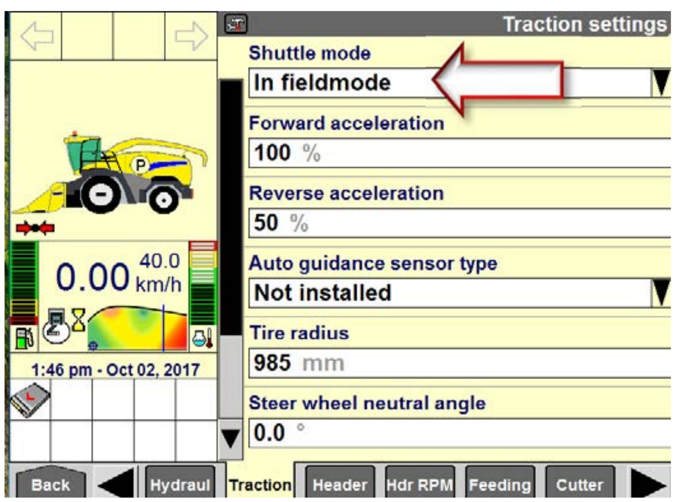
Grass Pickup and RI Header

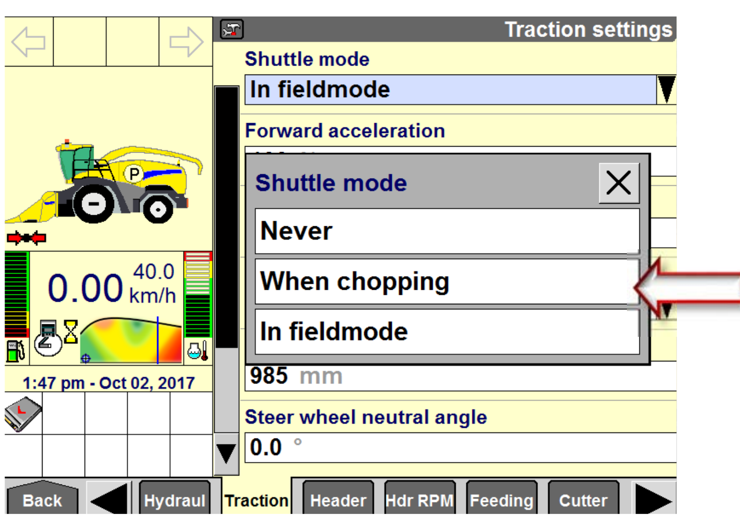
Cutterhead							LOC	PTO		Pick-up	RI
2 x 20	2 x 16	2 x 12	2 x 10	2 x 8	2 x 6	2 x 4		Pick-up	RI		
2-3	3	4	4-6	6 – 7	8	12 – 14	L	A	B	1	1
3-4	4 – 4.5	5 – 6	6-8	8 – 9	10 – 12	16 – 18			A		2
4-5.5	5 – 6.5	7 – 9	8-11	10 – 13	14 – 18	20 – 26					1
6-7	7 – 8.5	10 – 11	12-14	14 – 16	20 – 22	28 – 32	H		B	2	
7-9	9 - 11	12 – 15	14-18	17 – 22	24 – 30	34 – 44			A		2
9.5-13	12 – 16	16 – 21	19-26	23 – 32	32 – 42	46 – 64				1	1

In case of double drive: we recommend to use always “A” position on PTO drive to relief hydrostatic drive

CommandGrip™ Shuttle Configuration

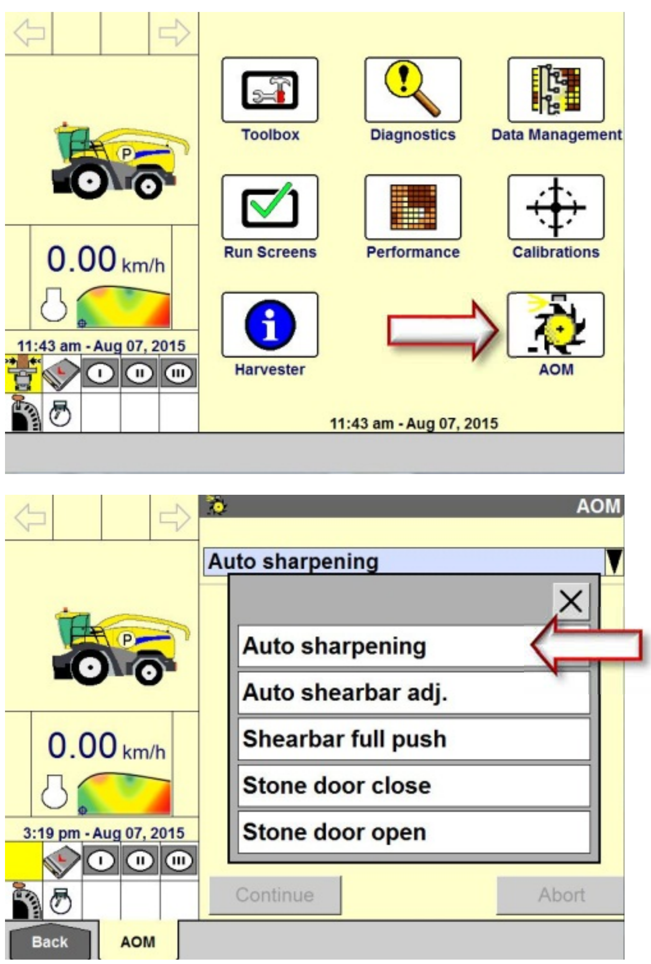
1. Select “Back - Toolbox - Traction”
2. Select “Shuttle mode”
   - This setting enables the driver to choose whether the machine only stops, or reverses immediately when pulling the multifunction handle backwards while pushing the unlock button, or vice versa
     1. Never: machine always stops
     2. When chopping: machine reverses immediately (while pushing unlock) when cutterhead is engaged
     3. In field mode: machine reverses immediately (while pushing unlock) when field mode is selected





Cutterhead Knife Sharpening

1. Select “Back – AOM”
2. Set engine at low idle speed
3. Engage the cutter head
4. To reverse sharpen (Push reverse sharpen button before engaging the cutterhead)
5. A pop-up window will allow you to set the time of sharpening
6. Engine goes automatically to 1400rpm

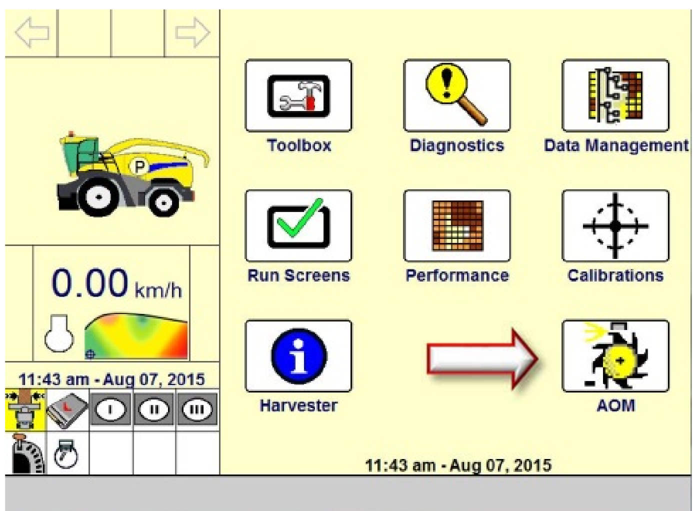


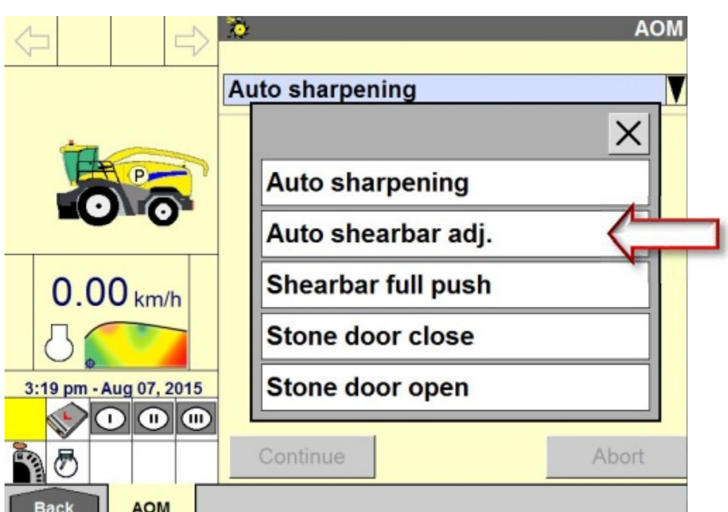
Automatic Shearbar Adjustment

1. Select “Back - AOM”
2. Select “Auto shearbar adj.”
3. Set header on the ground , engage the cutterhead and set engine on low idle

Note: Shearbar adjustment can be done with the cutterhead turning in reverse (if installed)

4. Select “Continue” to start adjustment procedure





Notes

Notes

This guide is not a replacement for the Operators Manual. If at any time additional assistance is required you are advised to consult the Operators Manual or you authorised New Holland Dealer

September 2018