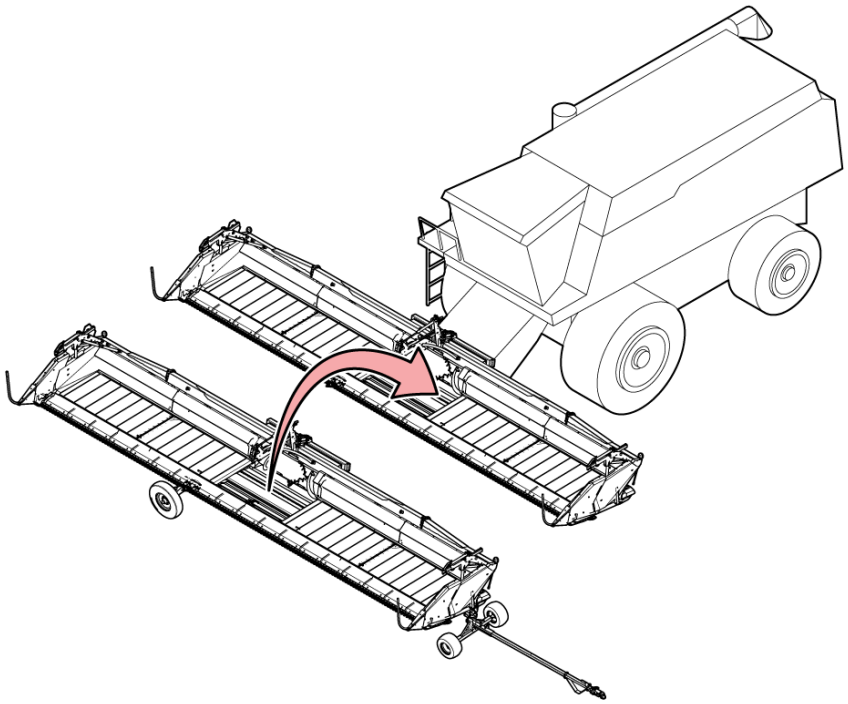
2025

AirFLEX NXT

Quick Start Guide



IMPORTANT!

This guide is a supplement to the operators manual, do not attempt to operate your equipment without first reading and understanding the full operator manual.

DANGER!

When you exit the combine, shut off the combine, engage the parking brake, and wait for all moving parts to come to a complete stop before approaching the header.

If working on a raised header, ensure the feeder house cylinder locks are in place.

Do not wear loose clothing or jewelry around moving parts.

Avoid high pressure hydraulic spray. Seek medical attention immediately if it punctures your skin.

Ensure all equipment is secured against sudden drops.

Read and understand all safety instructions in the operator manual before proceeding.

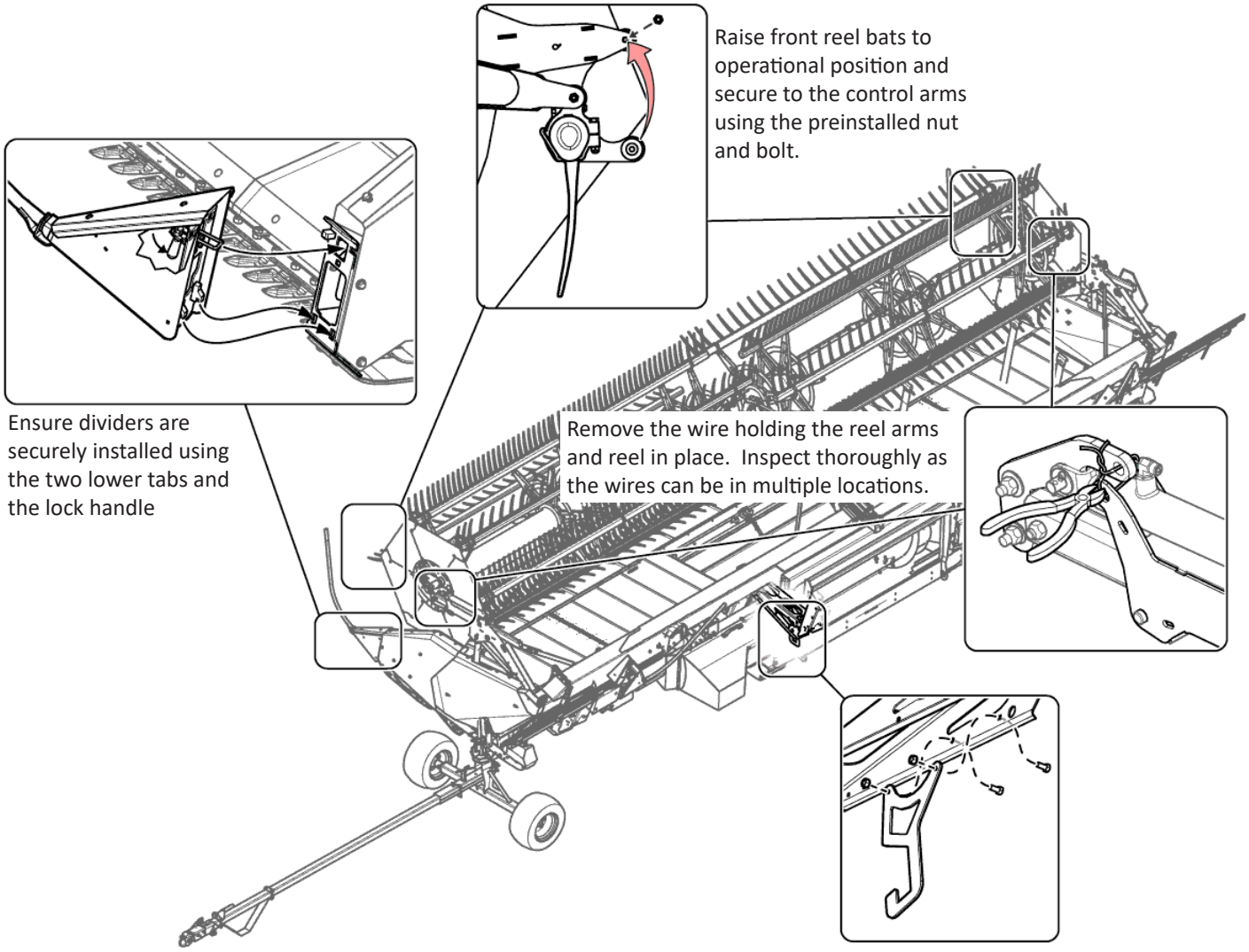
Honey Bee®

Revision 2.0 P/N: 95111-2025

Document Revision History			
Revision	Author	Date	Description
1.0	AD	05/26/2019	Document Created
1.1, 1.2	AD	05/29/2019	Spelling corrected, removed mention of upper stop bolt on auger drum.
1.3	AD	04/17/2020	Added 24v info to pg 6.
1.4	AD	02/11/2021	Added 2020 New Holland info Added Claas Lexion 6/7/8000 info Added Rostselmash info Removed tie-down bracket info Added note regarding feed auger drum position
1.5	AD	02/08/2022	Added calibration prep section Added make-specific info on reel PPR and max rpm. Added info on cut height setpoint Added gauge wheel safety strap info. Added Rostselmash Torum/RSM info Added JD 50/60/70 info
1.6	AD	03/22/2022	Added some notes re 200 vs SDX series
1.7	AD	02/14/2023	Updated NH Screens Updated text in section 4 to check for high voltage Added notes to use correct pressure for header width. Added feeder house rpm info Updated new holland sections Added note to Case Mid-Range section re changing sprocket. Added note to Claas Lexion 6/700 section about output speed.
1.8	AD	03/08/2024	Updated divider info Updated reel info Updated hitch storage bracket & transport cart lock Updated gauge wheel Updated automatix mounting info Updated psi & rpm recommendations
1.9	WG	01/22/25	Changed air system pressure from 110psi to 115psi Updated speed chart Changed reel finger distance Removed crop divider inspection note
2.0	AD	09/05/25	Case Header Pressure Float set to no instead of yes.

Table of Contents

1 - Header Preparation



Raise front reel bats to operational position and secure to the control arms using the preinstalled nut and bolt.

Ensure dividers are securely installed using the two lower tabs and the lock handle

Remove the wire holding the reel arms and reel in place. Inspect thoroughly as the wires can be in multiple locations.

Reinstall the nuts and bolts onto the strut after removing the bracket.

Fig. 1

Revision 2.0 P/N: 95111-2025

2 - Mounting the Header

① Move the feed auger drum forward to ensure it does not interfere with the combine's feederhouse.

② Release the transport cart lock and secure it with the pin, disconnect the cart's electrical harness.

③ Release the draw bar lock and disconnect its electrical harness.

④ Slowly drive the combine forward until the feeder house is inserted into the feeder house opening. Ensure it is properly aligned.

⑤ Slowly raise the header to its highest position.

⑥ Shut down the combine, engage the parking brake and engage the feeder house locks.

⑦ Lower the transport cart support bar and secure pin.

⑧ Lower the transport cart with the hand crank and unhook the straps from the header.

⑨ Raise the header and back away from the cart, lower the header back down to a working height.

⑩ Shut down the combine, engage the parking brake and engage the feeder house locks.

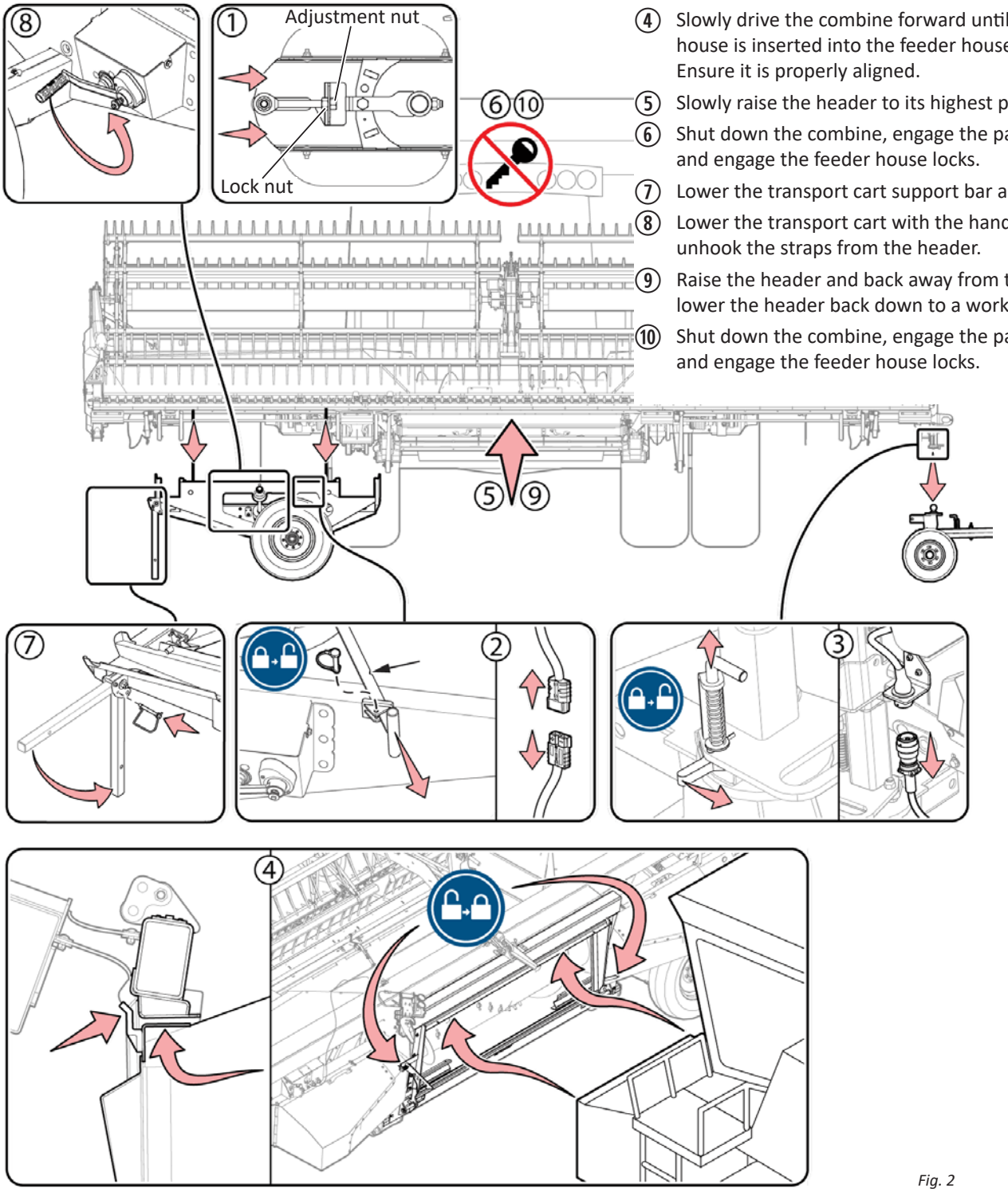


Fig. 2

3 - Finish Mounting

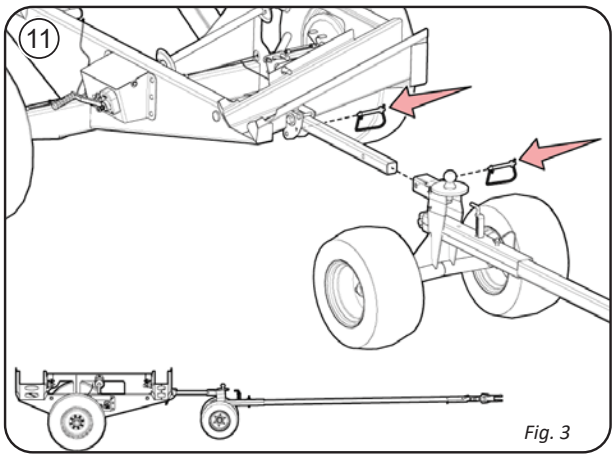


Fig. 3

⑪ Secure the transport cart and draw bar cart together, secure with pins as illustrated and place in a storage location.

⑫ Evenly adjust the left and right eye bolts on the feed auger drum so it is moved to within 1/2”(1.3 cm) of the combine feeder house protrusions.

⑬ Set the feed auger drum lower stop bolts to prevent the drum from contacting the rest of the header.

⑭ Rotate the auger drum by hand to ensure it will not contact the protrusions, tighten the lock nuts on the eye bolts.

⑮ Set Feed Auger finger timing so the feed auger fingers maintain adequate clearance from the components surrounding the feed auger drum.

⑯ Check All Clearances around the feed auger drum and adjust accordingly.

⑰ Set the gauge wheel safety straps to their operational position.

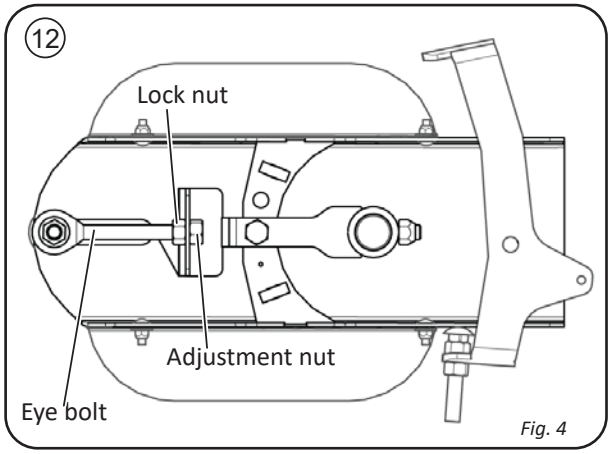


Fig. 4

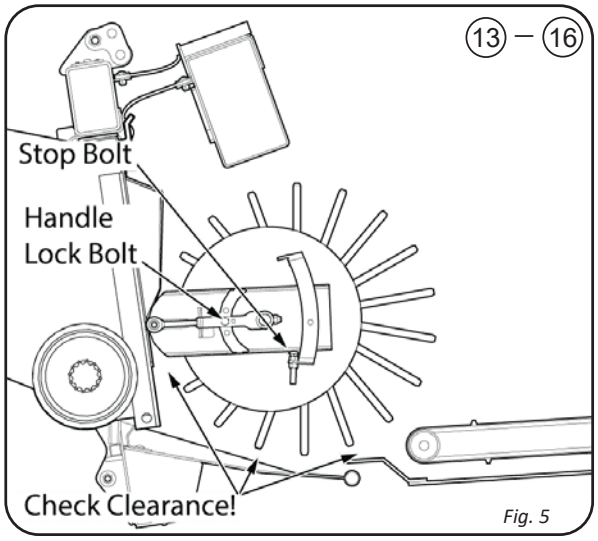


Fig. 5

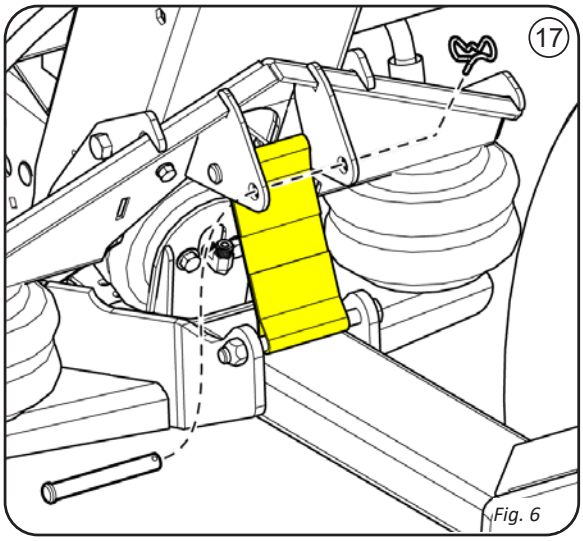
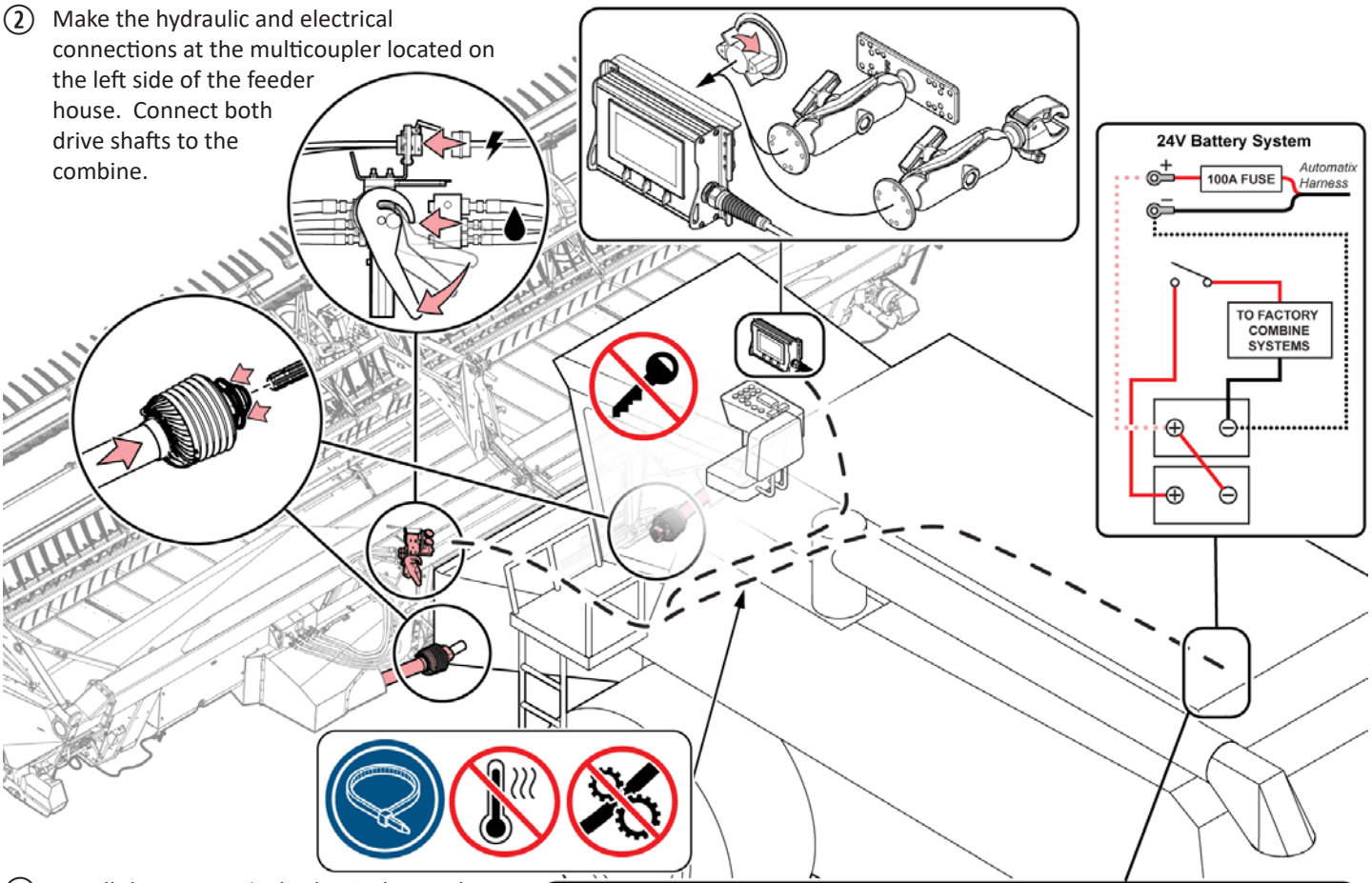


Fig. 6

Revision 2.0 P/N: 95111-2025

4 - Make Connections

1. Turn off the combine's master battery switch.
2. Make the hydraulic and electrical connections at the multicoupler located on the left side of the feeder house. Connect both drive shafts to the combine.



3. Install the automatix display in the combine cab using one of the provided mounting brackets.
4. Starting at the front of the combine, route the automatix harness under the combine cab and inside. Connect to the automatix display.
5. Route battery harness to combine battery, connect to power system after power switch to prevent Automatix from draining battery when combine is off. Leave slack in the harness at the feeder house pivot for full range of motion. Avoid contact with high temperature and moving parts.

IMPORTANT!

Make sure to check output voltage to header that it never exceeds 14 volts when operating or upon engine start-up.

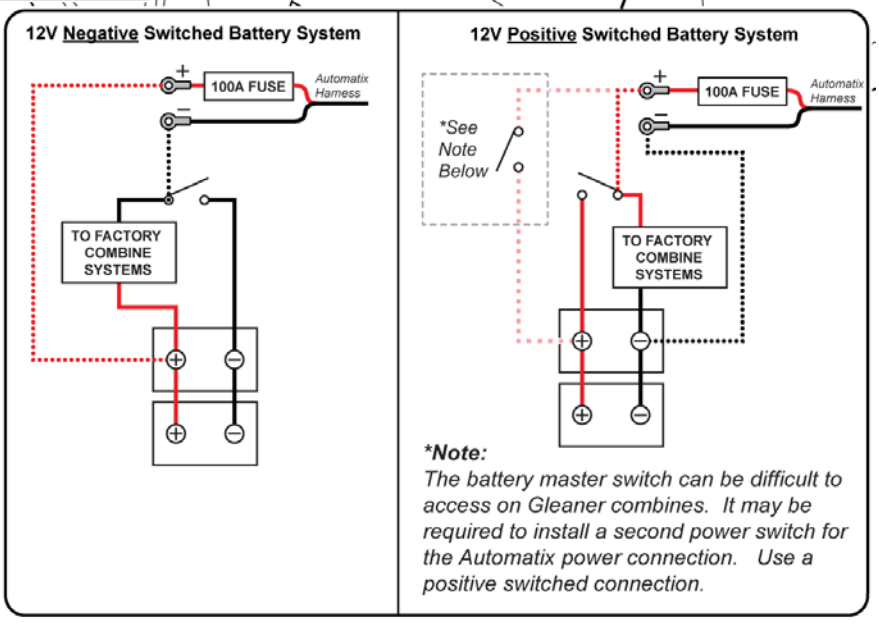


Fig. 7

5 - Header Setup Overview

1. With 115 psi in the air system, ensure each sensor 'flag' contacts its roller at the 'heel' of each strut at the rear of the header. The Flag should contact the center of the roller. This ensures the system reacts to input from the outer ends of the header first.

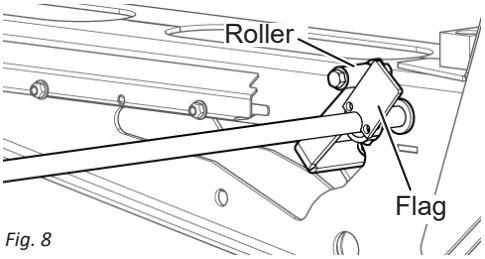


Fig. 8

2. Verify the header height sensor voltages on the Automatix display:
   - **In FLEX Mode:** With the header air system pressurized to approximately 115 psi, the sensor voltage should range between 1.45 and 1.55 volts.
   - **RIGID Mode**: With the header air system pressurized to the correct value for your header width as shown in the table below, the sensor voltages should range between 1.5 and 3.4 volts through the subframe sensor's full range of motion.

Width	25ft	30ft	36ft	40ft	45ft	50ft	60ft
PSI	90	95	100	105	110	115	125

Note: Refer to operator manual for detailed instructions.

IMPORTANT: Don't make assumptions, don't skip steps, fix all errors that occur before continuing.

6 - Set combine feeder house angle.

The Combine Feeder House must be tilted at a specific angle for optimal header operation. To set proper operation angle.

1. Park the combine and header on a firm level surface.
2. Set the header to FLEX mode and lower the air pressure until 30psi is reached.
3. Fully retract the hydraulic tilt cylinder and optional hydraulic skid shoes.
4. Lower the table until the cutter bar is fully pushed up.
5. Slowly raise the header until 2.00 volts (indicated by the arrows on the display) show on the sensor bar graph on the Automatix Lite display.

⚠ DANGER!

Shut off the combine, engage the parking brake, engage the feeder house safety stops and wait for all moving parts to come to a complete stop before exiting the cab.

6. Measure down to the ground from the pivot point of the outer-most paddle. There should be an 6-7" (15.4 - 17.8 cm) space when at the optimal feeder house angle.

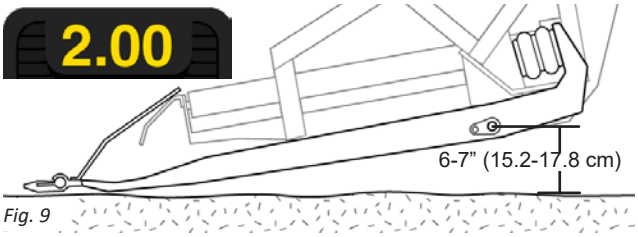


Fig. 9

   - If the paddle pivot is more than 6-7" (15.2 - 17.8 cm) above the ground, the feeder house is tilted too far forward and the cutter bar guards will dig into the ground.
   - If the paddle pivot is less than 6-7" (15.4 - 17.8 cm) above the ground, the feeder house is not tilted forward enough and the rear of the paddle will drag on the ground. 6-7" (15.2-17.8 cm)

7. Adjust the feeder house angle as necessary and re-test the angle as outlined in the previous steps. Tilt can be adjusted to suit ground conditions and habits of the operator. Ensure the feeder house angle does not change during calibration.

7 - Preparing Header for Combine Calibration

7.1 - Combine Header Height Calibration - FLEX Mode

1. Tilt the header fully back (hydraulic tilt cylinder retracted), open both gauge wheel isolation valves, ensure optional skid shoes are retracted.

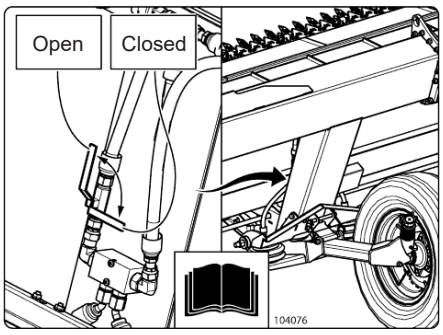


Fig. 10

2. Ensure header lateral tilt is level and the header and combine are sitting on a level surface.
3. Set header to FLEX mode, and pressurize to 30psi, proceed to section 8 on page 10.

7.2 - Combine Header Height Calibration – RIGID Mode

1. Ensure the header lateral tilt is level and the header and combine are sitting on a level surface.
2. If Hydraulic tilt cylinder is installed, fully tilt the header back.
3. Ensure the optional skid shoes are retracted.
4. Set header to RIGID mode. Raise header off the ground and pressurize to the correct psi for your header width as shown in the table below, close the gauge wheel isolation valves (see Fig. 10) then proceed to section 8 on page 10.

Width	25ft	30ft	36ft	40ft	45ft	50ft	60ft
PSI	90	95	100	105	110	115	125

8 - Combine Calibration

1. Ensure your header is prepared for calibration as outlined in section 7 on page 9.
2. The combine must be run at maximum RPM (harvest speed) and the hydraulic oil must be up to operating temperatures during calibration.
3. Check the oil level to ensure there is no air in the system (normally heard as a whining noise).
4. Set the AIRFLEX via the AutoMatix Lite monitor to RIGID mode if cutting off the ground or FLEX mode if cutting on the ground.
5. Set combine hydraulic header raise rate so it takes 6 seconds to lift the header from the lowest position to the highest position.
6. Set combine hydraulic header drop rate so it takes 7 seconds to lower the header from the highest position to the lowest position.
7. When the combine calibration is done, lower and run the header and combine rotor so automatic header height is enabled. Record a set-point for header height on the combine (i.e. 4" (10 cm)). Raise the table all the way up and laterally tilt it all the way to the left or right. Press the return to set point button on the combine. The header should lower back to the set point AND level out automatically. If this fails, see section 12.
8. Slowly increase header height sensitivity via combine controls until the header starts hunting up and down. Decrease sensitivity by 10-20% until the header stops hunting. Set the tilt sensitivity to half the height sensitivity minus 10%, so if the header height sensitivity is set to 200, the tilt sensitivity should be set to approximately 90 (200/2 = 100, 100 - 10% = 90).

NOTE:

The combine specific settings listed on the following pages are recommendations only. Optimal settings will vary by equipment configuration and conditions. It is the equipment operator's responsibility to ensure they operate their equipment in a safe, efficient manner.

9 - Feeder House Maximum RPM

Check to ensure combine feederhouse PTO output speed and knife speed is correct. Premature failure of drive components may occur if speed is incorrect. See the operator manual for instructions on manually checking the feeder house speed.

IMPORTANT!

Machines equipped with a variable-belt drive feeder house are designed for use with a corn head or row-crop head. Knife speed in excess of 620 RPM can cause vibration and premature failure of driveline and cutterbar parts. If it's technically not possible to set the combine PTO speed to required RPM's (the knife speed is still exceeding 620 RPM, please contact your nearest Honey Bee representative for a custom solution.

If your combine's feeder house is configured to run at multiple speeds, ensure it is set to run at the 'Grain' speed.

Combine	Required Feeder House Output RPM	Knife Speed (RPM)
New Holland/CaseIH	565-575	595-605
CaseIH X130 to X150 Mid-Range Series	575-625	605-615 (NOTE: Switching of sprocket on knife drive may be required)
CaseIH 2100-2500 Series	540	592
Claas	760-770	603-611
Fendt Ideal/Gleaner/ Massey Ferguson/ Challenger	610-660	565-610
John Deere S/T Series	490	602
John Deere 50/60/70 Series	520	612
Rostselmash	528	579

IMPORTANT!

Do not exceed the RPM values for your combine in the table listed above or damage to your equipment may result.

10 - Cutting Height Setpoint

10.3 - Cutting Height Setpoint - FLEX mode

1. Ensure the header is **tilted backward**, the gauge wheel isolation valves are open and FLEX mode is selected on the Automatix control panel.

IMPORTANT!

If changing cutting modes ensure combine calibration is done prior to setting setpoint.

2. Use the air pressure switch on the Automatix control panel to set the system pressure to an appropriate value for your application.
    - 30-40 psi for extreme conditions like Terraces.
    - 40-50 psi for normal ground conditions.
    - 50-60 psi for soft/sticky/wet/slow ground conditions.
    - Higher than 65 psi may be needed for large headers (50ft and above) with skid shoes attached.

NOTE:

Please add an additional 10 PSI if skid shoes are installed on the cutter bar. Accessories attached to the cutter bar require additional pressure to counteract their weight.

3. Lower the header until the sensor bar graph on the automatix control panel shows 2.00 volts (8 bars) and set this as the cut height via the combine controls.

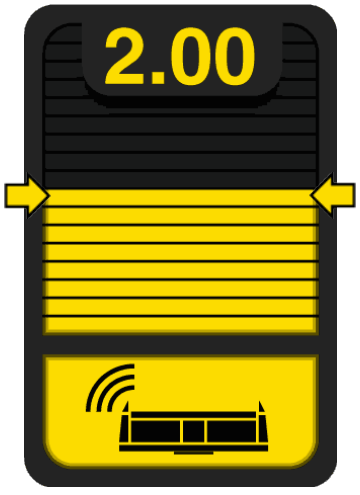


Fig. 11

10.4 - Cutting height setpoint - RIGID mode

1. Ensure the header is **tilted backward** (if the hydraulic tilt cylinder is installed), the gauge wheel safety strap is in the operational position, RIGID mode is selected on the Automatix control panel, and dividers are in their locked position.

IMPORTANT!

If changing cutting modes ensure combine calibration is done prior to setting setpoint.

2. Confirm the RIGID air pressure is set to the recommended value for the header width:

Width	25ft	30ft	36ft	40ft	45ft	50ft	60ft
PSI	90	95	100	105	110	115	125

3. Close both gauge wheel isolation valves (see Fig. 10.)
4. Lower the header to your desired cut height and set the cut height setpoint via the combine controls. If your combine has the ability to set two or more cut height setpoints you adjust the header height and set your second cut height as well.

IMPORTANT!

If header is fully lifted and combine header height resume is pushed and header does not lower or lowers very slowly then air pressure is set too high. Lower air pressure and re-test.

NOTE:

If the header is unbalanced, causing the left or right end to run lower/higher than the other end, you can adjust the subframe airbag position as described in the operators manual.

11 - Reel Setup

Set the pitch of the reel fingers via the adjuster at the end of the reel. The middle position is a good place to start. If crop is wrapping around the reel, set a less aggressive finger pitch.

Ensure the reel is level and that the reel fingers maintain a minimum distance of 2” (5 cm) from the cutter bar. Adjust the reel height adjustment bolts located on the underside of the reel arms if necessary.

12 - Calibration Troubleshooting:

Check that the combine is receiving the correct sensor voltages from the header sensors.

Verify the correct combine settings have been entered.

If header is not reacting quick enough, sensitivities may need to be increased. If header is hopping or jumping then sensitivities may need to be decreased.

NOTE:

It may be necessary to power down the combine after calibrating or changing settings to get them to take effect.

13 - John Deere S550 and S600 Series Combines

1. Enter the combine's header setup screen by selecting the header icon.

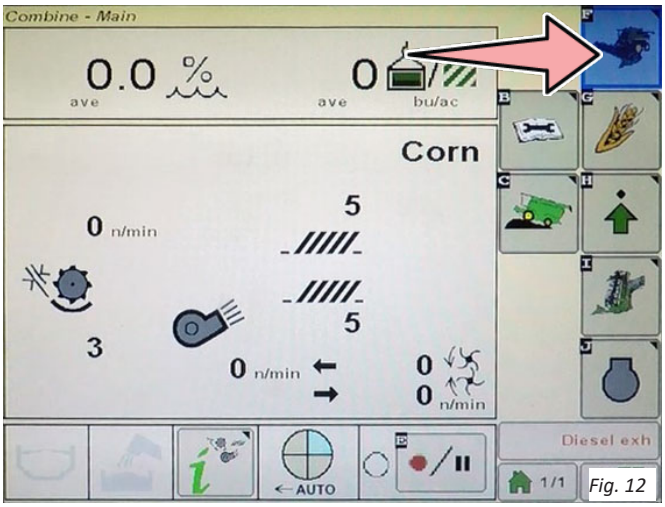


Fig. 12

2. Set the header width.

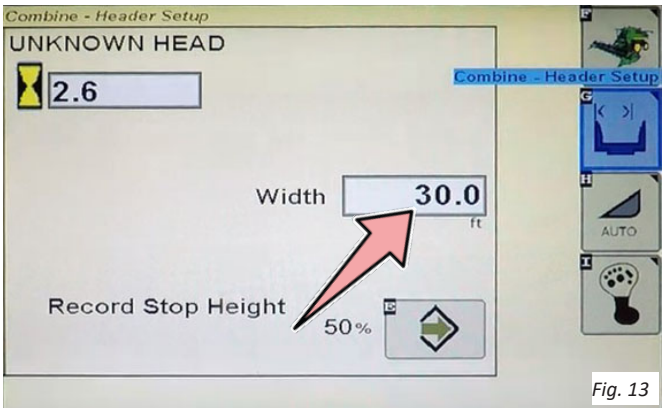


Fig. 13

3. Raise the header to 60% of it's maximum height and press the enter button to save the value.

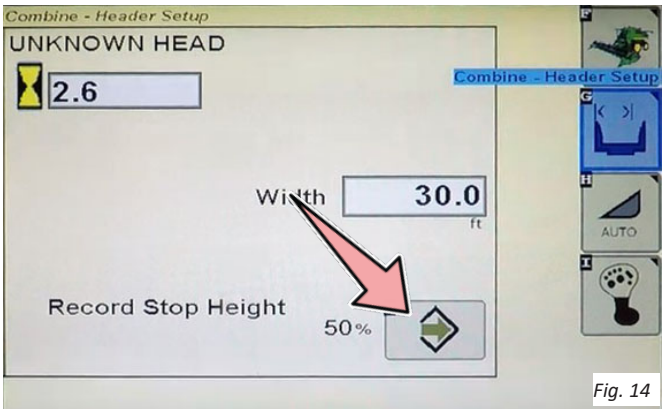


Fig. 14

4. Select the Auto Header screen via the AUTO button.

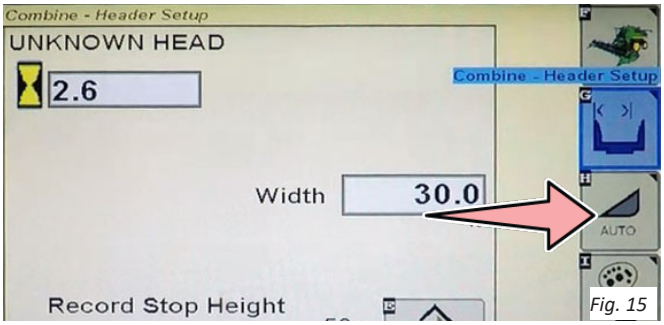


Fig. 15

5. Ensure the following boxes are checked:
   - Header Height Control
   - Auto HHC
   - Auto reel speed
   - Auto tilt
   - During setup, faceplate angle must be set.

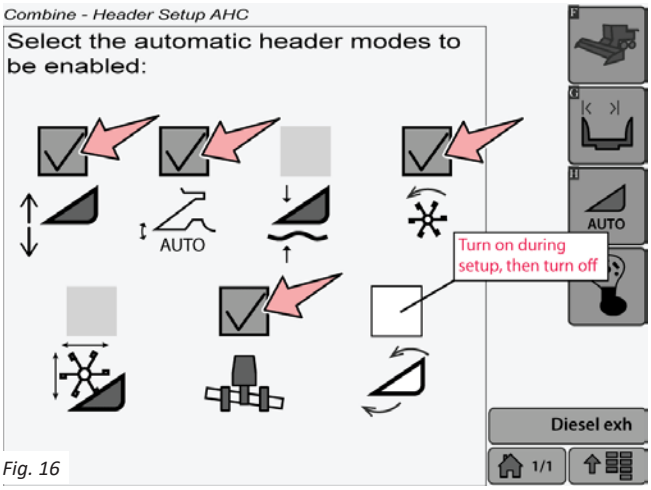


Fig. 16

NOTE:

If your combine comes equipped with hydraulic fore/aft adjustment on the feederhouse, a good starting point for feederhouse fore/aft position is "-3.5" shown on the combine monitor.

13.1 - John Deere S550/S600 Combine Reel PPR settings

1. With the key switch turned on, select the main menu icon on the combine's display.

2. Select the Message Center icon.

3. Enable Technician Mode:

- Select the Addresses Icon

- Hold down the check mark button on the combine's control panel for 30 seconds then release it.

Fig. 17

- A 'T' should appear next to the device drop down box indicating that Technician Mode has been activated.

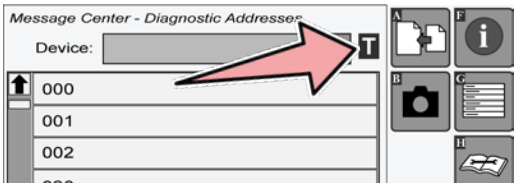


Fig. 18

4. Select the drop down box, scroll down and select LC1.001.

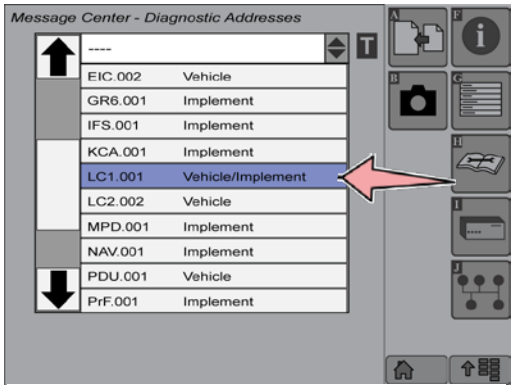


Fig. 19

5. Scroll down and select address 160.

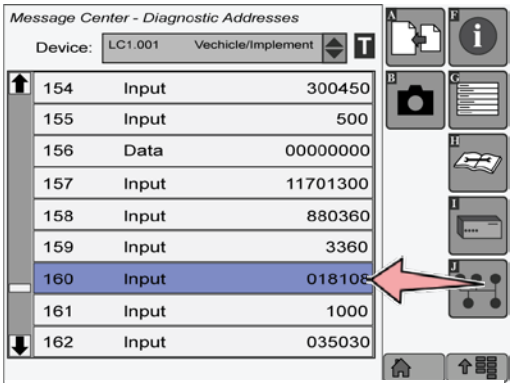


Fig. 20

6. The default value for address should now be displayed on the screen (018108 or 11018108). The 018 portion of this number represents the default PPR for your combine. Select the Accept icon.
7. Replace the 018 section of the number with 048 to accurately reflect the Honey Bee Reel PPR. The number should now be 048108 or 11048108. Press the Accept icon again to accept your changes.
8. If auto reel speed rotates the reel too quickly, increase the ppr until an acceptable reel speed is achieved.

14 - John Deere S700 Series Combines

1. Set the header width via the header screen

Fig. 21

2. Select the Auto Contour icon (A) to get to setup screen.

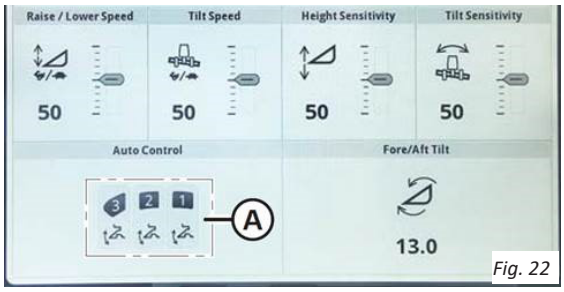


Fig. 22

> **NOTE:**
>
> If your combine comes equipped with hydraulic fore/aft adjustment on the feederhouse, a good starting point for feederhouse fore/aft position is "-3.5" shown on the combine monitor.

3. The following calibrations must be performed starting at the top of the list and working your way down. Some feeder house calibrations may need performed before mounting the header.
    - Feeder House Lateral Tilt Range Calibration
    - Feeder House Lateral Tilt Speed Calibration
    - Feeder House Raise Speed Calibration
    - Feeder House Tilt Fore/Aft Range Calibration
    - Header Calibration (Must be performed last)

Fig. 23

4. Once all the calibrations are done (including the header calibration) then the Header Automation settings can be set. Then set the following **CRITICAL** settings on the Auto Header Controls screen:
    - **Height Resume: On**
    - **Height Sensing: Activate**
    - **Lateral Tilt: Activate**
    - **Dial-a-Speed: On**
    - **Fore/Aft Resume: Off**

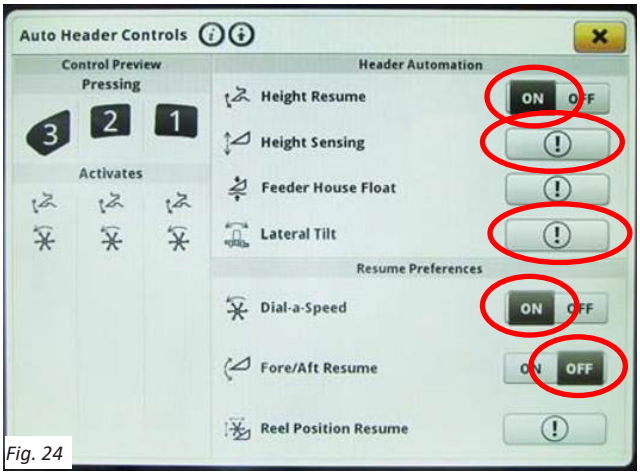


Fig. 24

15 - John Deere 50/60/70 Series Combines

1. Press the diagnostics button on the cornerpost.	
2. Press the up button until “CAL” is displayed on the screen.	
3. Press the enter button.	
4. Press the up button until “Hdr” is displayed on the screen.	
5. Press the enter button, the screen should show “Hdr-dn”.	
6. Lower the header completely to the ground.	
7. Press the calibration button, the screen should show “Hdr-up”.	
8. Raise the header to its highest position.	
9. Press the calibration button, the screen should show “EOC”.	
10. Press the enter button.	
11. Press the escape button until you return to the main screen.	

12. If calibration fails and the display shows the error ER74 (left height position sensor voltage range less than 2.0 VDC) & ER84 (right height position sensor voltage range less than 2.0 VDC) then the Flex HHC sensor linkage arm can be moved to the rearmost hole on the sensor activation arm in order to get a larger sensor range. See picture below.

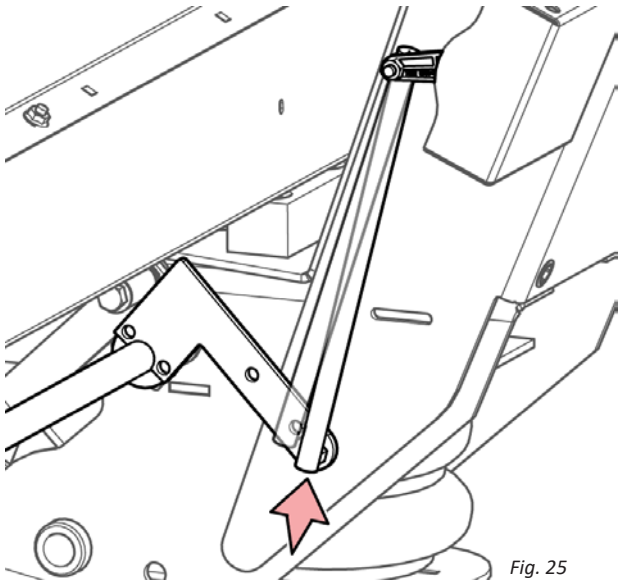


Fig. 25

16 - 2018 and Older New Holland Combine Calibrations/Settings

NOTE:

If operating an older New Holland header with a 10 volt header height control system, the combine requires a 10 volt kit from HeadSight to make the system compatible with the Honey Bee header. You will require 1 x INSIGHT and 1 x QB0-NHCR-31C harness to be installed between the header and the combine adapter harness. Contact Headsight for details.

1. Enter the following settings on the Head 1 screen of the combine systems. Enter the width of your header in the Header Width field and Target Work Width field.

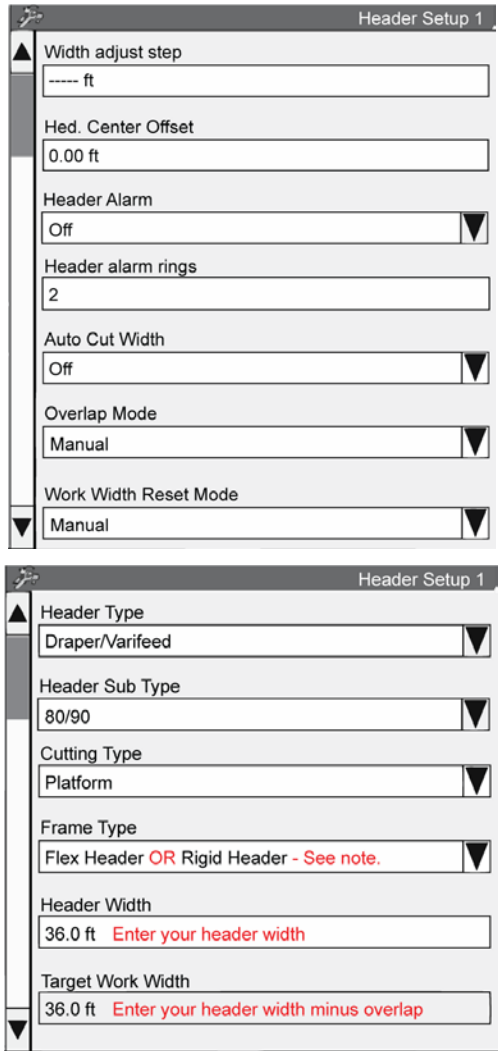


Fig. 26

NOTE:

For Frame Type, enter Flex header when operating in FLEX mode, and Rigid header when operating in RIGID mode.

2. Ensure the following settings are entered in the Head 2 screen of the combine systems. Use all the values below as a starting point, adjust as necessary to suit your conditions.

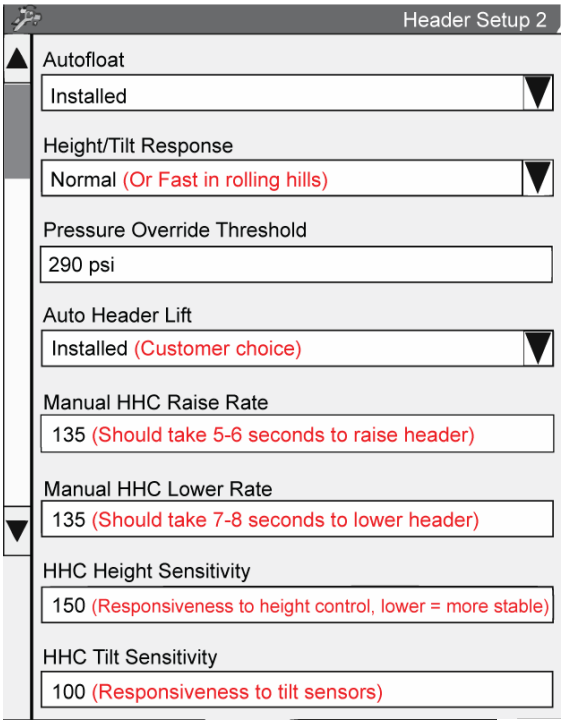


Fig. 27

(Continued on following page)

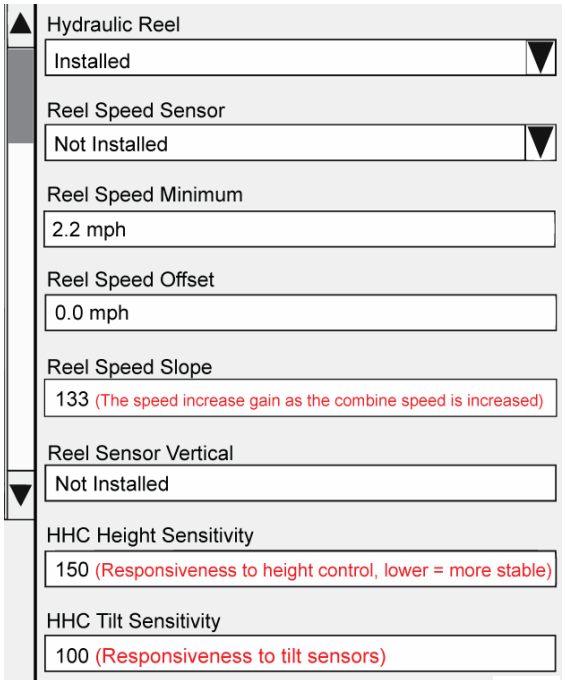


Fig. 29

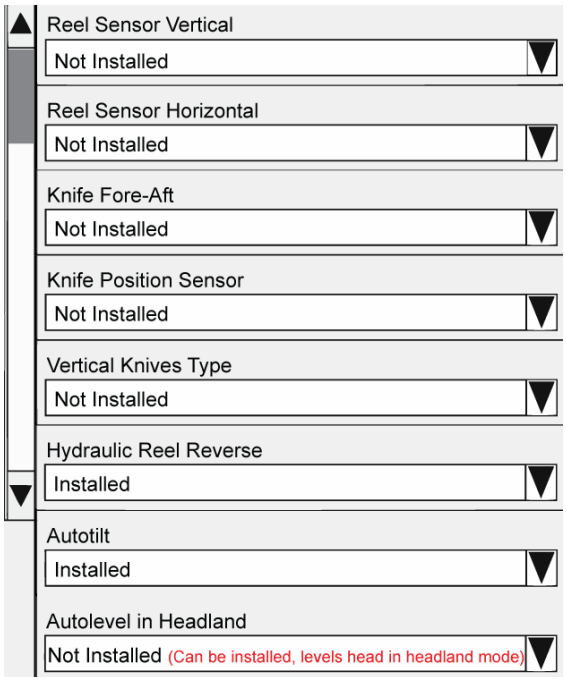


Fig. 30

16.1 - New Holland Header Icons

When in the automatic HHC mode there should be a wavy line under the header in the left hand screen.

If the Pressure Float override is set too low or the header hit the ground hard it will send the header into pressure override. When it does a wavy line plus an up arrow will appear. Depending on the duration it may be possible that pushing the resume button may be needed.

If a straight line is under the header the Automatic HHC has been turned off.

16.2 - For Variable Speed Combines

On variable speed feederhouse combines make sure the output PTO speed is set at no more then 575 RPM. PTO speeds in excessive of 575 RPM can result in premature failure of knife drive components.

17 - 2019 and Newer New Holland Combine Calibrations/Settings

NOTE:This section shows 2022 software, older combines should updated to the latest available version.

1. Set **header type** as “Draper/ Varifeed TM”.

Fig. 32

2. Set **header sub type** as “80/90”.

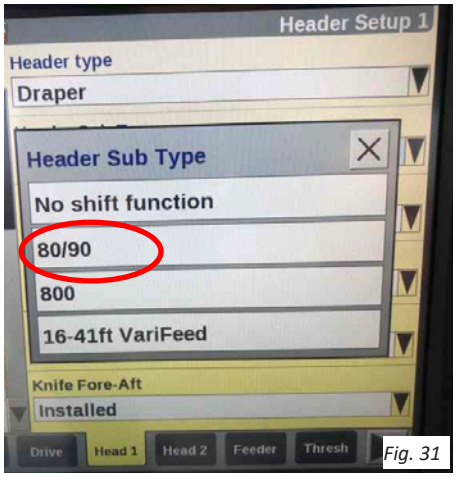


Fig. 31

3. Set the rest of the options on Header Setup 1 screen as follows:

Fig. 34

Frame type: Flexhead in FLEX mode and Rigid head in RIGID mode.

Vertical Knife Type: Not installed

Header Flotation Pressure Sensor: Installed.

Knife Fore-Aft: Not Installed.

Hydraulic Reel Reverse: Installed

Header width: Width of your header.

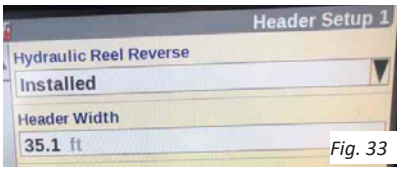


Fig. 33

4. Set the options on the Header Setup 2 screen as follows:

Hydraulic Reel: Installed

Reel Speed Sensor: Not installed.

Reel Horizontal Position Sensor: Not installed.

Reel Vertical Position Sensor: Not installed.

Reel Speed Minimum: Operator’s Choice

Maximum Work Height: At least 50%.

Fig. 35

Autofloat: Installed

Auto Header Lift: Installed
Note: this raises the header when combine is in reverse.

Autotilt in Headland: Installed

Pressure Override Threshold: 290 psi

Height/Tilt Response: Normal but other choice is Fast

HHC Height Sens.: Set at least 150 to start and then adjust as needed.

HHC Tilt Sens.: Start low and increase as needed.

The rest of the Raise and Lower rates and Sensitivity settings vary by header size and configuration, these settings can be used to fine tune header response.

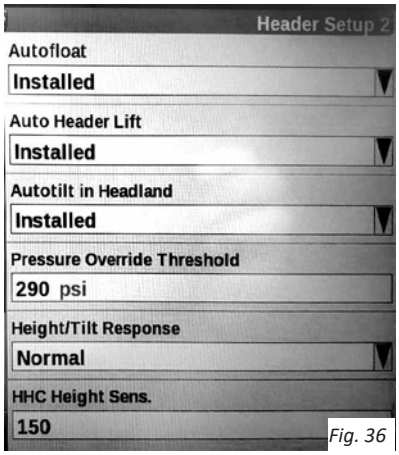


Fig. 36

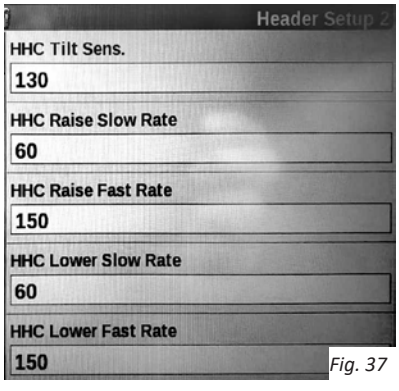


Fig. 37

To finish the configuration process, access the Dealer mode in the monitor by first turning off the combine, then turning the key to the 'on' position without actually starting the engine.

Hold both the auger unload button and header resume until the technician icon shows up. You will now be in dealer mode until you shut the key off.

Fig. 38

A small 'technician' icon will appear on the display when going into dealer mode.

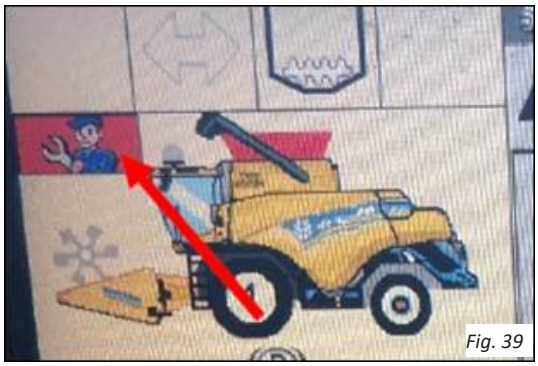


Fig. 39

5. The three items that are revealed by the technician mode can be located in the Header Setup 2 screen:

Reel Diameter

Reel Displacement per Revolution (cc/rev)

AutoFloat II

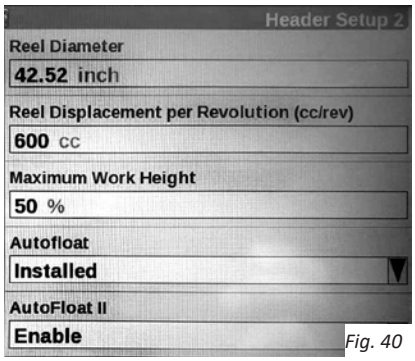


Fig. 40

6. On variable speed feederhouse combines make sure the output PTO speed is set at no more then 575 RPM. PTO speeds in excessive of 575 RPM can result in premature failure of knife drive components.

NOTE:

In some cases during calibration the screen may state that the inclination sensors need to be calibrated. This can be dismissed by using the enter button.

This has nothing to do with the HHC controls. The new system gets the adjustments down 1% or less. This is some of the controls for the automatic crop settings.

18 - Claas Lexion 6/700 Series Combine Calibration/Settings

1. Select the front attachment type “Grain cutterbar, make from other manufacturer”

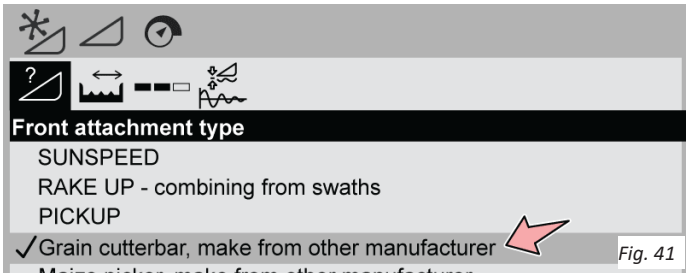


Fig. 41

2. Enter the width of your header minus your intended overlap (the example below is the value entered for a 45ft header with 1ft overlap)

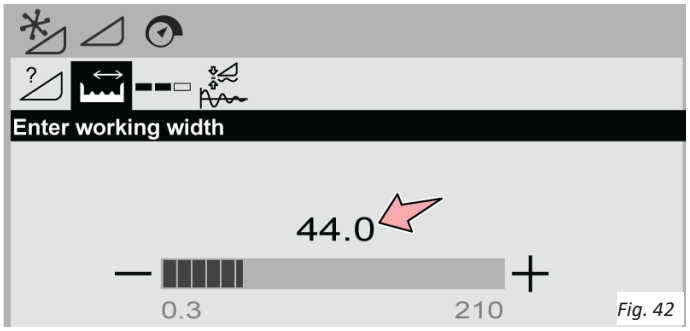


Fig. 42

3. Ensure the settings listed below are entered into the sensitivity screen.

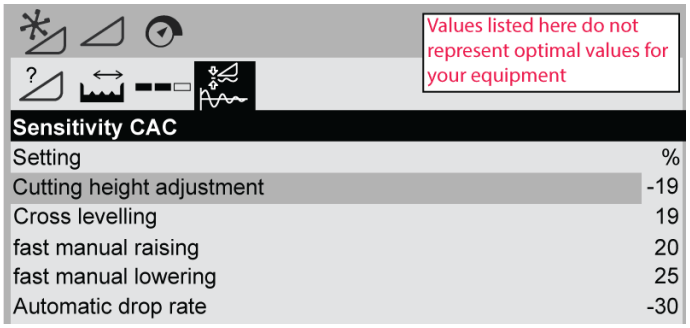


Fig. 43

4. Ensure VARIO Automatics and Cutting Angle Automatics are turned OFF.

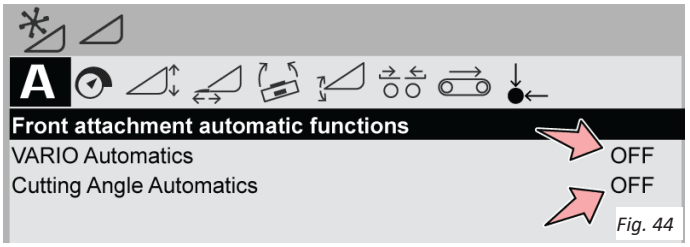


Fig. 44

5. Run the learning endstops procedure in the Cross Leveling section of the menu.

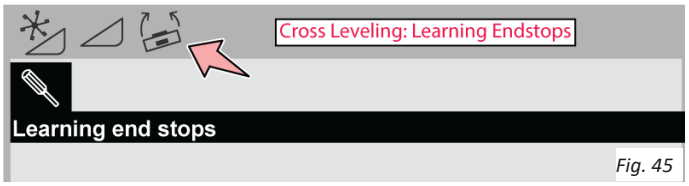


Fig. 45

6. Run the learning endstops procedure in the Front Attachment Height section of the menu.

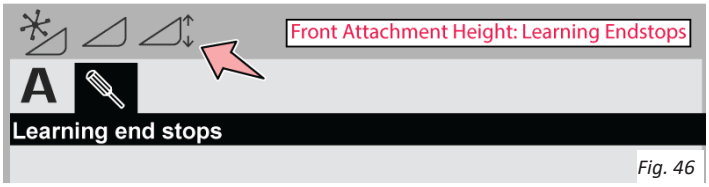


Fig. 46

7. Set the feeder house angle for the combine to 0 as shown below. This value may require further adjustment depending on your equipment configuration.

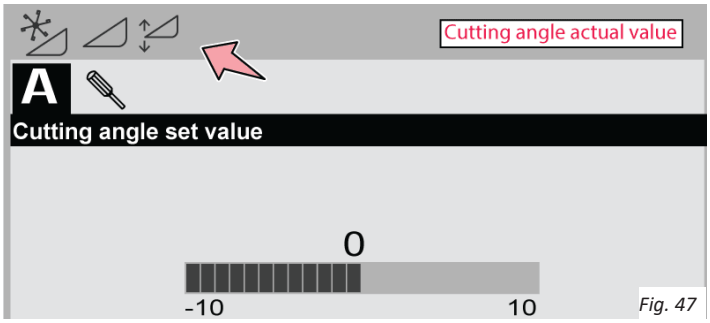


Fig. 47

8. Set the Working position for area calculation to approximately 80%.

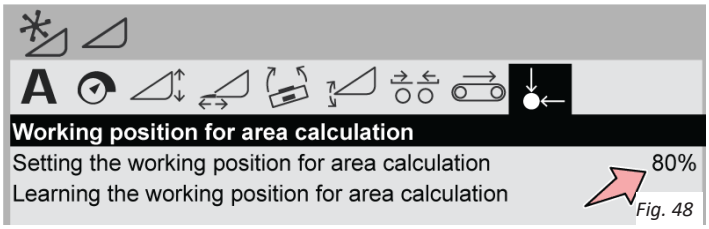


Fig. 48

9. On variable speed feederhouse Claas combines make sure the output PTO speed is set at no more then 767 RPM. PTO speeds in excessive of 767 RPM can result in premature failure of knife drive components.

   On 6/700 Series Claas combines with variable speed feederhouse drive the output speed shown in cab monitor has a range of 300-420 RPM which is measuring the top shaft of the combine. Please set speed to 420 RPM which will correspond to a output PTO speed of 767 RPM.

19 - Claas Lexion 6/7/8000 Series Combine Calibration/Settings

1. Select the header type via the “Header specifications” tab. Select “Third party product – Flex header”.

2. Select header width in “Header specifications” tab.

3. Set initial “Auto Contour sensitivity” and “Header manual raising and lower speed”.

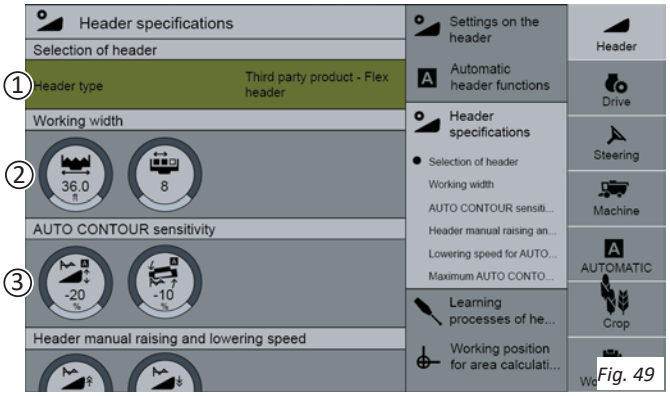


Fig. 49

4. Set Maximum Auto Contour ground pressure. Set this as high as possible. Approximately 1000 kg.

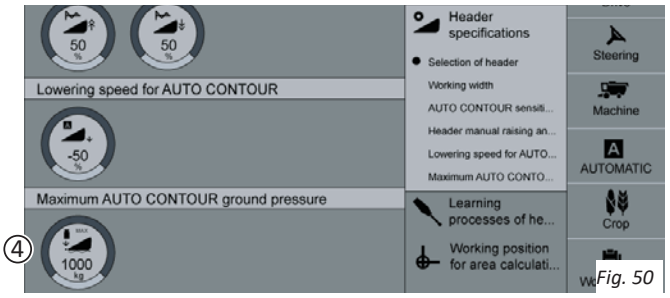


Fig. 50

5. Go to the AutoMatic header functions screen. Ensure Automatic reel speed is turned on and Automatic reel height and fore/aft is turned off. Ensure Lateral leveling with preselected height control ON/OFF is ON and Automatic header pitch ON/OFF is OFF.

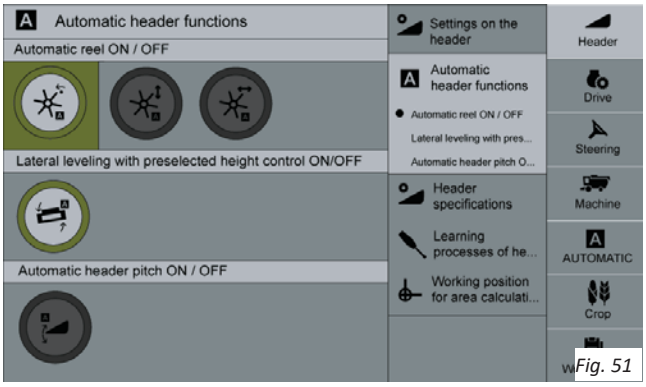


Fig. 51

6. Go to the “Learning processes of header” screen and do the calibrations for the header pitch, lateral tilt, then the Header height.

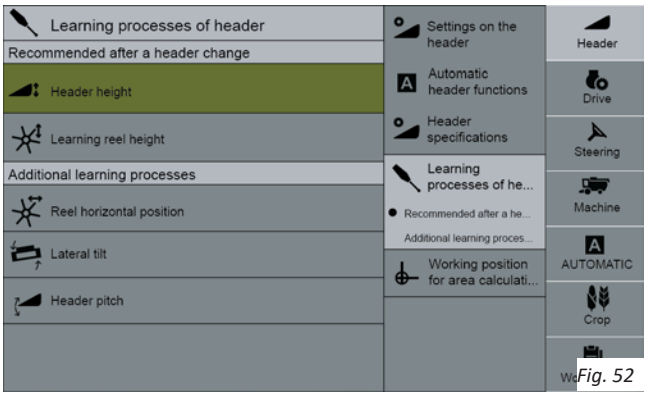


Fig. 52

7. Go to the “Working position for area calculation” screen and set it to 80%.

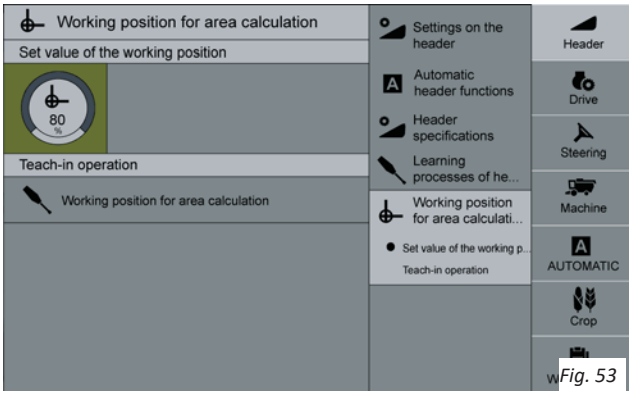


Fig. 53

8. After all calibrations are done you can go ahead and set the header cutting height and use the bottom of the cutting height button on the multi-function handle.

Fig. 54

9. On variable speed feederhouse Claas combines make sure the output PTO speed is set at no more then 767 RPM. PTO speeds in excessive of 767 RPM can result in premature failure of knife drive components.

NOTE:

On later model Claas combines you may have to install a voltage converter on the header to send correct voltage to the header sensors.

See you AirFlex NXT operators manual for more information.

20 - Massey Ferguson Combine Calibration/Settings

NOTE: In order for header height control to function on on older model Massey Ferguson combines, a ball valve must be installed on the accumulator and closed. Consult your Massey Ferguson dealer for more information on adding this ball valve to your accumulator.

1. In the combine setup screen:
   - Select the “Flex” header type
   - Enter the width of your header under “Header Width”
   - Set the “Cutoff Height” to 80%.
   - Reel PPR: 48.

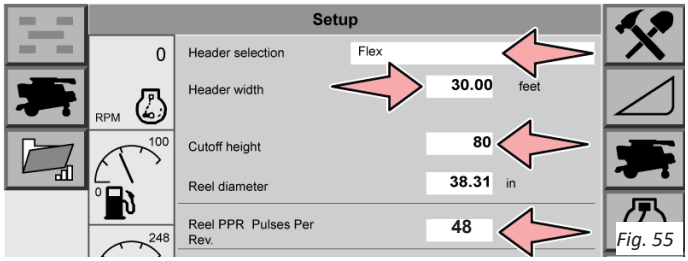


Fig. 55

2. In the Header Control Table settings tab:
   - Set both Max UP PWM and Max DOWN PWM to 100.
   - Set both Max RIGHT PWM and Max LEFT PWM to 80.

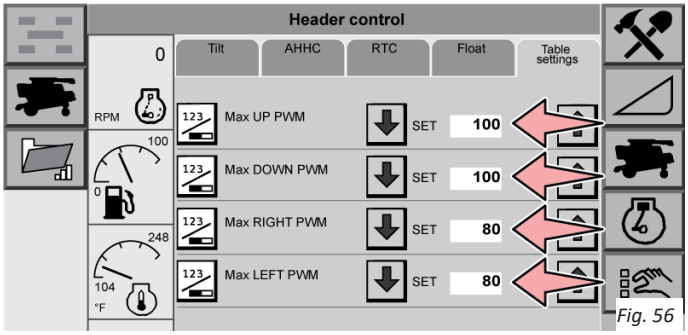


Fig. 56

3. On the AHHC tab:
   - Ensure Automatic Header Height Control is enabled (check mark)
   - Set the sensitivity to 50% as a starting point.

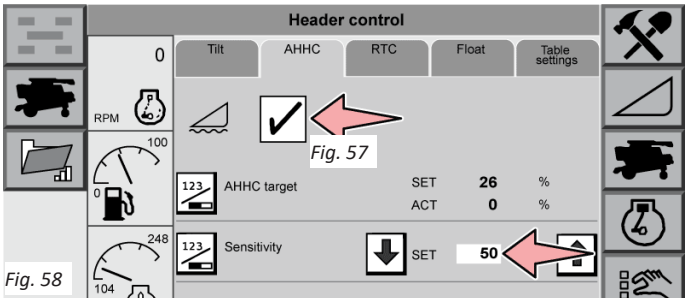


Fig. 57

Fig. 58

4. On the Tilt tab:
   - Set the Autotilt sensitivity to 20%
   - Set the Autolevel sensitivity to 20%

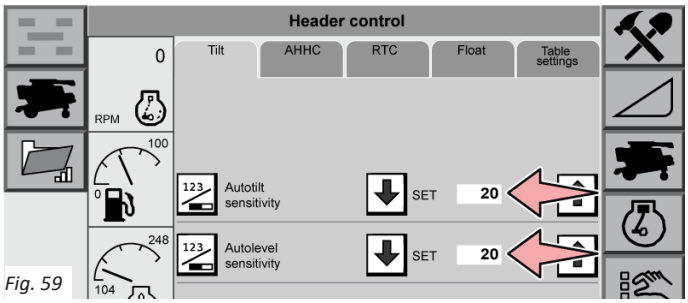


Fig. 59

Note: The optimal lateral tilt sensitivity value is directly related to the auto header height control sensitivity and can be found using the following equation:

$$\text{Lateral Tilt Sensitivity} = \left(\frac{\text{AHHC Sensitivity}}{2}\right) - 10\%$$

21 - Case Flagship Combine Calibration/Settings

This section covers the CaseIH 7120, 8120, 9120, 7240, 8240, 9240, 7250, 8250 and 9250 combines.

1. Enter the following settings on the Header Setup 1 screen of the combine systems. Enter the width of your header in the Header Width and Target Work width fields.

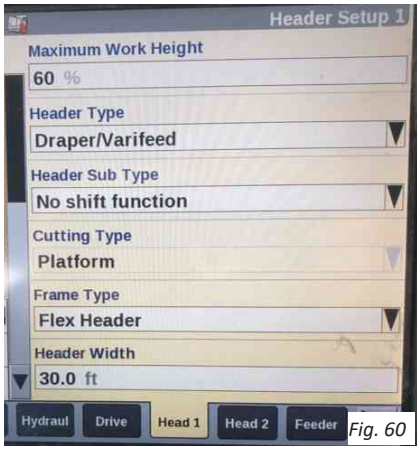


Fig. 60

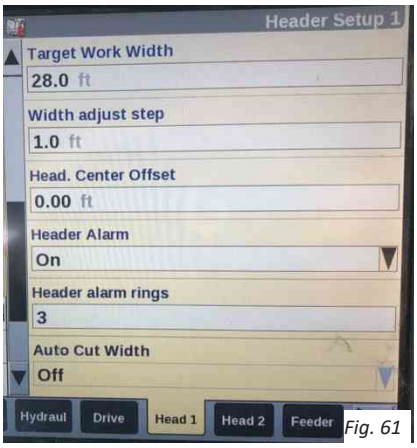


Fig. 61

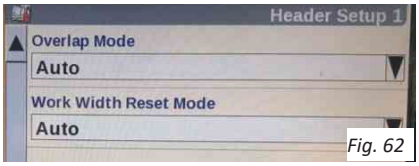


Fig. 62

2. Ensure the following settings are entered in the Header Setup 2 screen of the combine systems. Use all the values below as a starting point, adjust as necessary to suit your conditions.

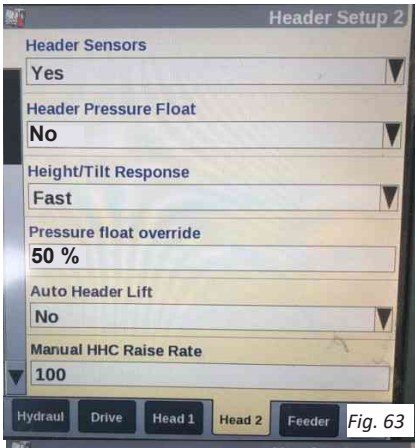


Fig. 63

Fig. 64

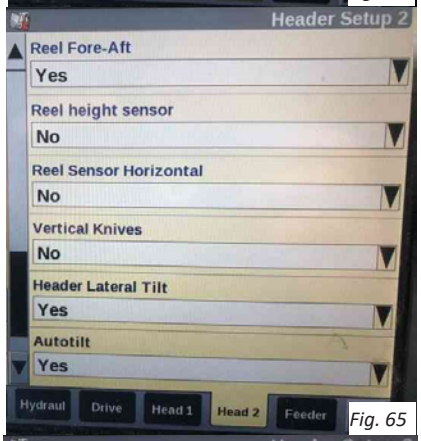


Fig. 65

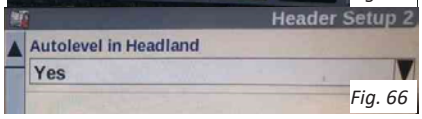


Fig. 66

21.1 - CASE IH Header Icons

When in the automatic HHC mode there should be a wavy line under the header in the left hand screen.

If the Pressure Float override is set too low or the header hit the ground hard it will send the header into pressure override. When it does a wavy line plus an up arrow will appear. Depending on the duration it may be possible that pushing the resume button may be needed.

If a straight line is under the header the Automatic HHC has been turned off.

21.2 - For variable speed combines

On variable speed feederhouse combines make sure the output PTO speed is set at no more then 575 RPM. PTO speeds in excessive of 575 RPM can result in premature failure of knife drive components.

22 - Case Mid-range Combine Calibration/Settings

This section covers CaseIH 5130, 6130, 7130, 5140, 6140, 7140, 5150, 6150 and 7150 combines.

1. Enter the following settings on the Header Setup 1 screen of the combine systems. Enter the width of your header in the Header Width and Target Work width fields.

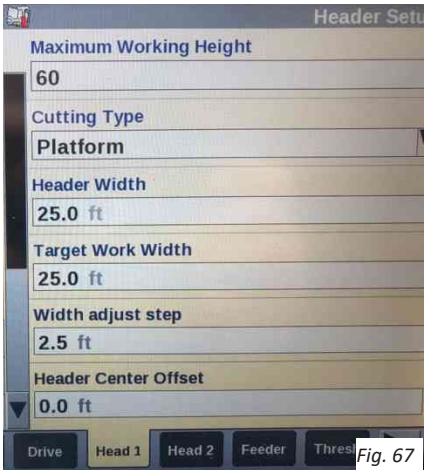


Fig. 67

2. Ensure the following settings are entered in the Header Setup 2 screen of the combine systems. Use all the values below as a starting point, adjust as necessary to suit your conditions.

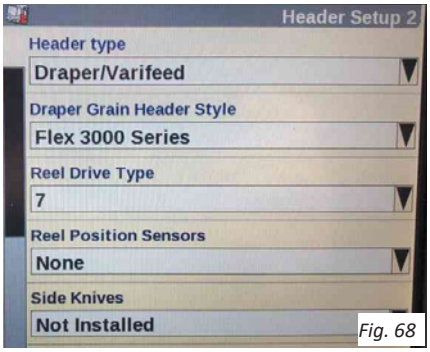


Fig. 68

Fig. 69

22.1 - CASE IH Header Icons

When in the automatic HHC mode there should be a wavy line under the header in the left hand screen.

If the Pressure Float override is too low or the header hit the ground hard it will send the header into pressure override. When it does, a wavy line plus an up arrow will appear. It may be possible that pushing the resume button may be needed.

If a straight line is under the header the Automatic HHC has been turned off.

22.2 - Check combine PTO Output Speed

To ensure proper performance of Mid-Range CaseIH combines, verify that the PTO feederhouse speed to the header is set to 565-575 RPM. If the PTO speed exceeds this range and cannot be adjusted, change the knife drive timing belt gear ratio to slow the knife to below 620 RPM. If the PTO speed is above 575 RPM, replace the 47 tooth sprocket with the 50 tooth sprocket that is included with the header when the Mid-Range CaseIH combine adapter is installed.

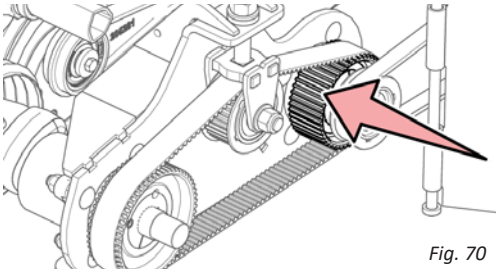


Fig. 70

22.3 - Combine Header Calibration.

1. Park combine on level ground with the engine running.
2. Thresher and header must be turned off.
3. Lower the header to the ground and hold down button for 2 seconds after the header has contacted the ground.
4. Raise the header fully to the top without releasing the raise button. If the header pauses momentarily while lifting this indicates that the calibration was completed successfully.

23 - Fendt Ideal Combine Calibration/ Settings

1. Ensure the AutoMatic HHC button and AutoMatic tilt buttons are pressed on the armrest console.

Fig. 71

2. Second step is selecting all the header parameters in the combine monitor. Select the combine icon.

Fig. 72

3. Then select the header settings icon:

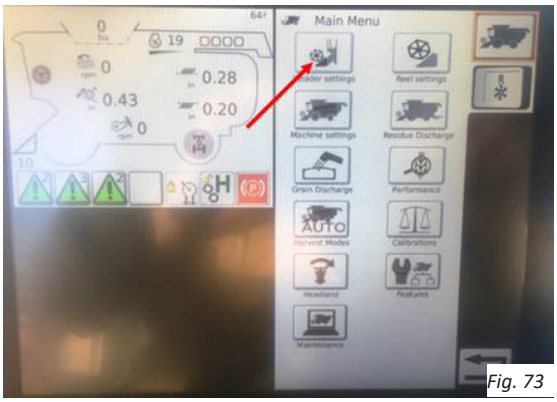


Fig. 73

4. Select the proper Header Configuration in drop down menu. So select the drop down menu then hit the “+ ABC” icon and select “PowerFlow” from the menu. Selecting this will allow us to get our hydraulic fore/aft and header tilt to work.

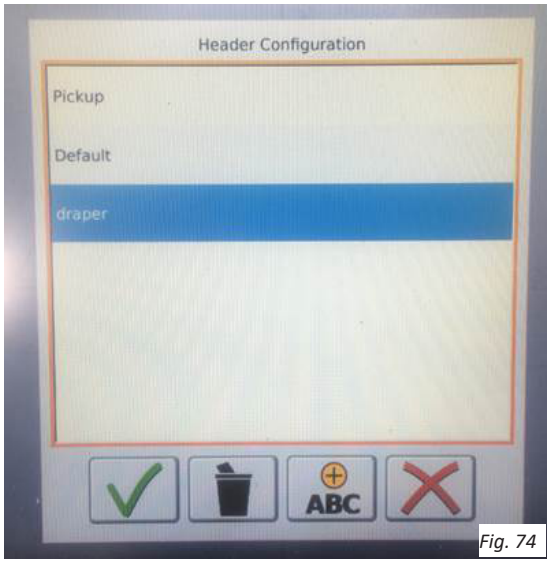


Fig. 74

5. Then set the header width, keep the reel diameter the same and change the Reel PPR to 48. Also select the top drop down menu and we will want to select

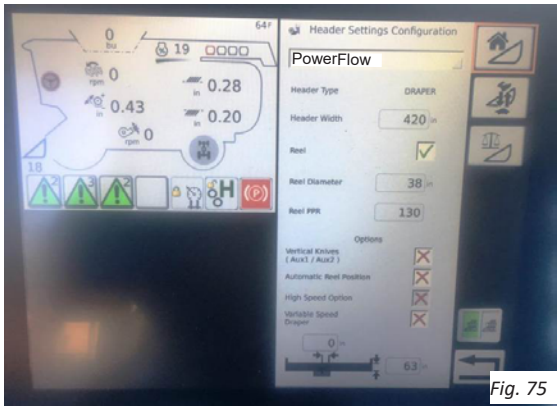


Fig. 75

6. Follow the header and reel speed calibrations by following the instructions in the combine operator’s manual.

24 - CaseIH 2100-2500 Series Combine Calibrations/Settings

1. Turn off the Accumulator Ride control switch which is under the armrest cover.

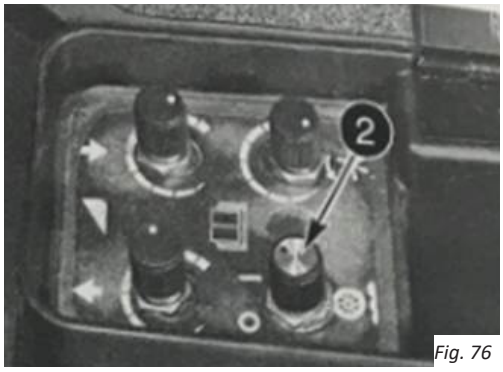


Fig. 76

2. If Auto Reel Speed function is desired turn it on. See combine operator's manual for details.

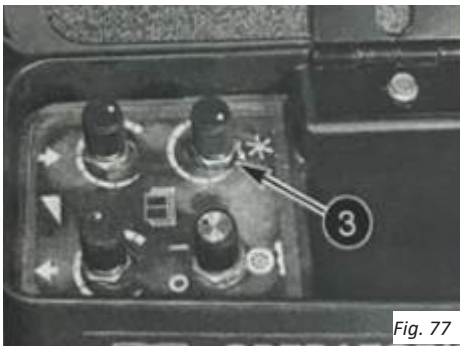


Fig. 77

3. Make sure the header height switch is on (HT) and the Lateral tilt button is on.

Fig. 78

4. Go into the monitor (if one is installed) and select the setup screen and then go to combine tab and set the header type (platform), header width, cutting width (same as width).

Fig. 79

Fig. 80

5. After all is setup, calibrate the header HHC by following the instructions in the operator's manual.

NOTE: HeadSight kit##HP0IH23-32C-2020 must be installed between header and combine electrical for proper operation.

25 - S8 & Earlier Gleaner Combine Calibration/Settings

Because Gleaner combines are equipped with 'Bang-Bang' style control valves, an aftermarket modification must be made to the combine so the Automatic Header Height Control system can operate effectively. There are two options:

- From AGCO dealer: Pulse Width Modulated Proportional Valve Upgrade Kit (Headsight)
- From Honey Bee: BeeBox

If neither of these kits are installed, the Automatic Header Height Control system will not function correctly.

Calibration

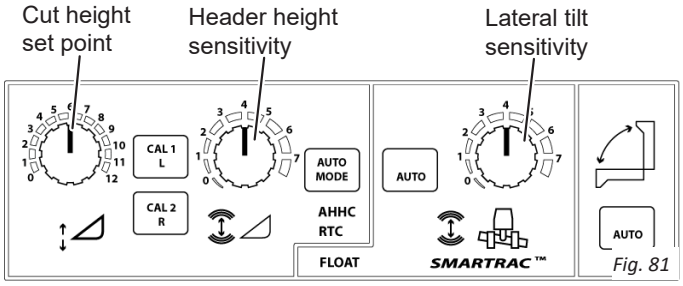


Fig. 81

1. Close the ball valve on the accumulator to disable it during the calibration process. The ball valve can be partially opened after calibration to allow partial flow (up to 30%). Do not fully open the valve when operating the AirFLEX.
2. Open the combine settings screen and enter the following values:
   - Enter the header width in the Header Size field.
   - Set your cut height in the Header Ht Cal field.
   - Set the Width Reduce value to the amount you will overlap your swaths. If you are running a 40ft AirFLEX, and you want 2ft of overlap, then you would enter 5% (2ft is 5% of 40ft).

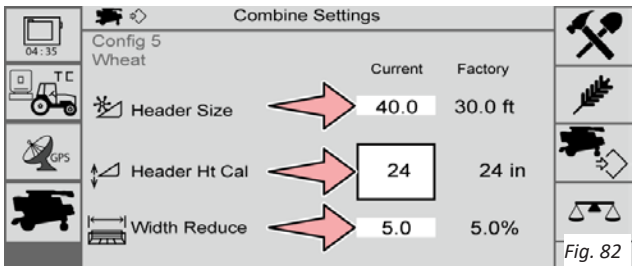


Fig. 82

3. Start combine and bring engine rpm to just over 2000 RPM.
4. Press hold Cal1 until lights flash on the combine control panel.
5. Lower the header all the way to the ground, then press the Cal 2 button.
6. Raise the header to highest position, then press the Cal 2 button.
7. Tilt header down to the left, then press the Cal 2 button.
8. Tilt header down to the right, then press the Cal 2 button.
9. All lights should flash, level the header and press the Cal 1 button to exit calibration.
10. If all lights remain off, the combine is calibrated. Refer to your combine operator's manual for further details.
11. Set the header height sensitivity to the highest possible setting for optimal performance. Turn up the sensitivity until the header starts 'hunting' up and down, then turn it down until the 'hunting' stops.
12. The lateral tilt sensitivity must be set to a lower value than the Header Height sensitivity. The optimal lateral tilt sensitivity can be found using the following equation:

$$\text{Lateral Tilt Sensitivity} = \left(\frac{\text{AHHC Sensitivity}}{2}\right) - 10\%$$

26 - S9 Gleaner Combine Calibration/ Settings

1. The two switches shown below are used to turn on automatic header height (left switch) and automatic lateral tilt (right switch). Enable auto lateral tilt before proceeding.

Fig. 83

2. On the combine Main Menu, select Header Settings.

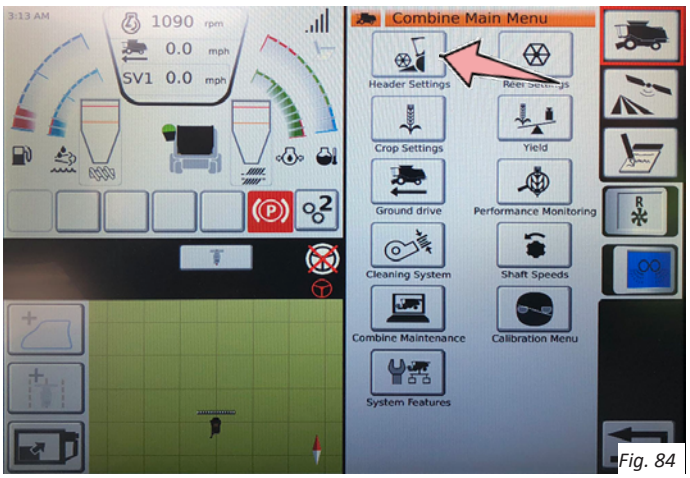


Fig. 84

3. Ensure RTC and AHHC is enabled and Float is disabled. Enter the following sensitivity settings to start (these can be modified later as needed)

RTC: 60 **Auto Level:** 50
AHHC: 100 **Auto Tilt:** 70
Float: 50

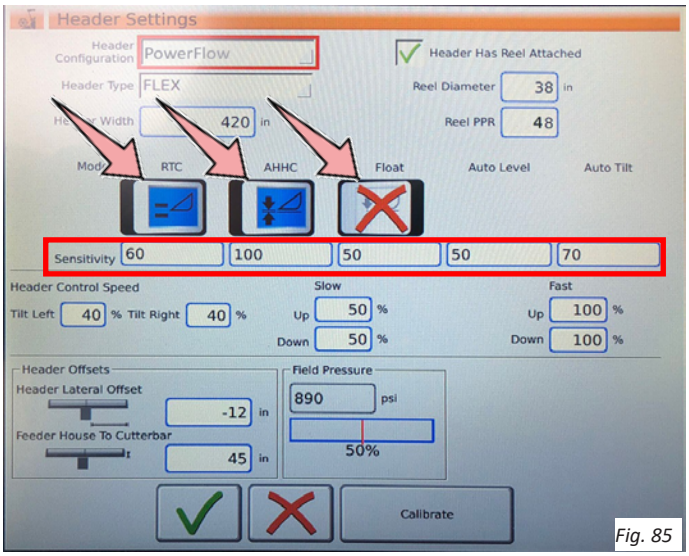


Fig. 85

4. Ensure the other settings shown in the illustration above are entered into the Header Settings screen on your combine:

Reel Diameter: 38 in.
Reel PPR: 48
Tilt Left: 40%
Tilt Right: 40%
Slow Up: 50%
Slow Down: 50%
Fast Up: 100%
Fast Down: 100%
Header Lateral Offset: -12 in
Feeder House to Cutterbar: 45 in.

5. Once the above settings are verified, return to the combine Main Menu and select the Calibration Menu, then select Header Calibration. Follow the onscreen instructions

27 - Rostselmash Acros 595+ & Torum 750-765

1. Make sure combine battery harness is connected to batteries in the correct location. The Rostselmash combines have a 24 volt battery setup so make sure the battery harness is connected to the correct battery to have a 12 volt power connection. Please refer to section 4 on page 7 for more information.
2. Go to the Settings screen in the combine monitor and select the “auto CFS” header icon to setup the header correctly.

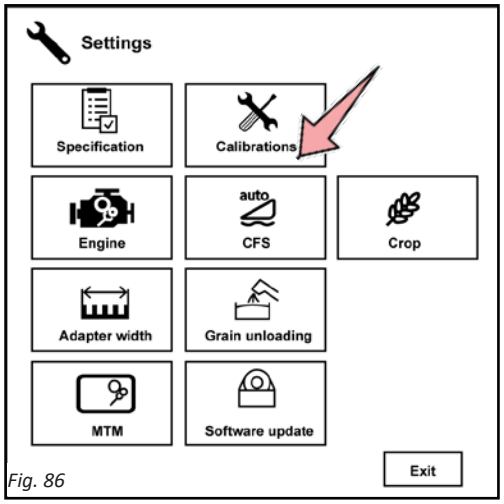


Fig. 86

3. Set the Mode 1 and Mode 2 for the Electrohydraulic contour following settings set to “Cutting Height”.

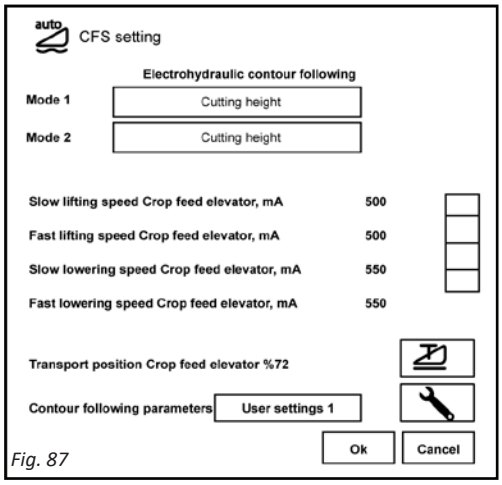


Fig. 87

4. Adjust the lifting lower speeds so you have an approximate lift speed of 6 seconds from the lowest to the highest position and a lowering speed of 7 seconds from the highest position to the lowest position. Adjust the Transport position Crop feed elevator to 50% or higher.

5. Perform the header calibration by going into the Calibrations screen via the settings screen.

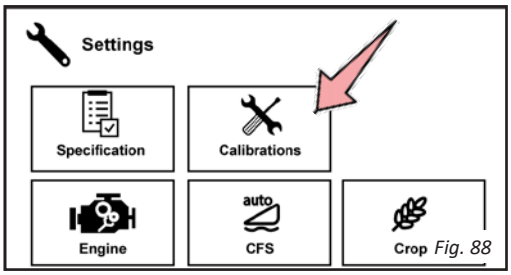


Fig. 88

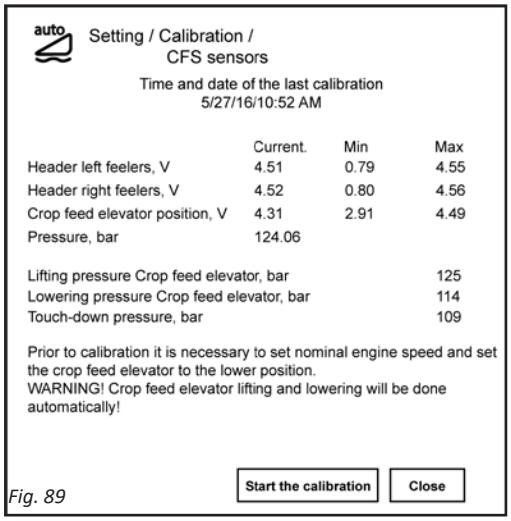


Fig. 89

6. Access the CFS setting screen (as described in step 2) then access the Contour Following Parameters screen via the wrench icon.

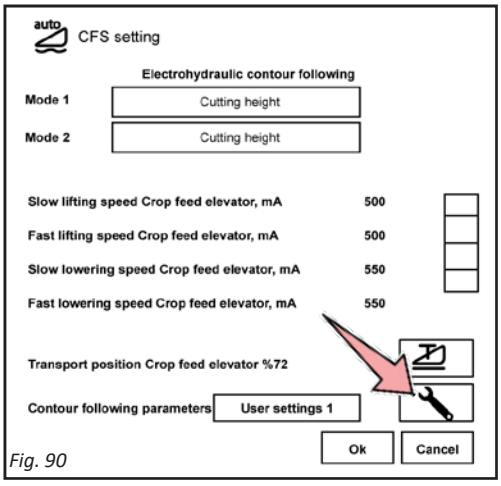


Fig. 90

7. Adjust the “Feeler sensitivity, %”, “Lifting/Lowering delay, ms” and “Header tilting delay, ms” in the Contour following parameters screen. Adjust so header is as responsive when in operation.

Contour following parameters

Parameter	Factory settings	User settings 1	User settings 2	User settings 3
Maintaining of the cutting height:				
Feelers sensitivity, %	20	60	20	20
Crop feed elevator position allowance, %	2	2	2	2
Pressure maintenance:				
Lifting threshold after bumping, bar	10	10	10	10
Pressure maintenance allowance, bar	3	3	3	3
Pressure maintenance delay, ms	100	100	100	100
Lifting/lowering period by pressure, ms	200	200	200	200
Pressure control pause, ms	150	150	150	150
General:				
Lifting/lowering delay, ms	100	100	100	100
Header tilting delay, ms	500	500	500	500

Ok Cancel

Fig. 91

28 - Rostselmash Torum 770-785 & RSM-161

1. Open the settings screen via the main menu

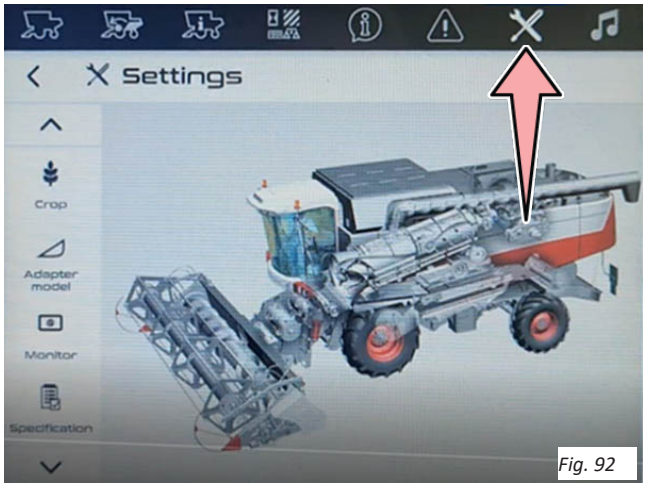


Fig. 92

2. Open the adapter model page and enter the following settings:

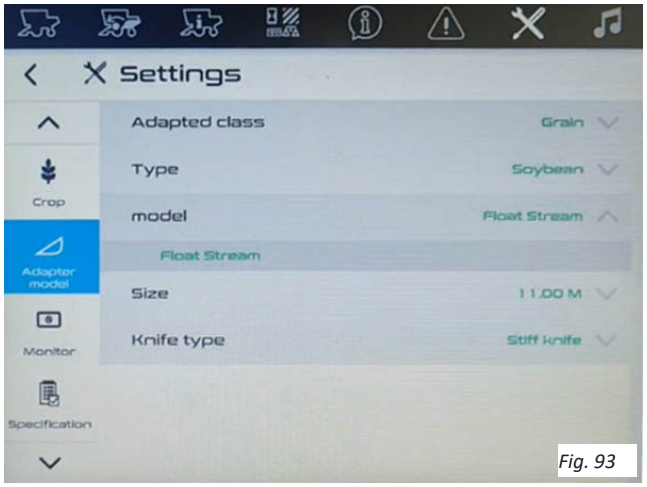


Fig. 93

- Adapter class: Grain
- Type: Soybean
- model: Float Stream
- Size : Size of your header
- Knife type: Stiff knife

IMPORTANT!

Do not use the Honey Bee setting even though it is listed.

3. Scroll down and open the CFS page

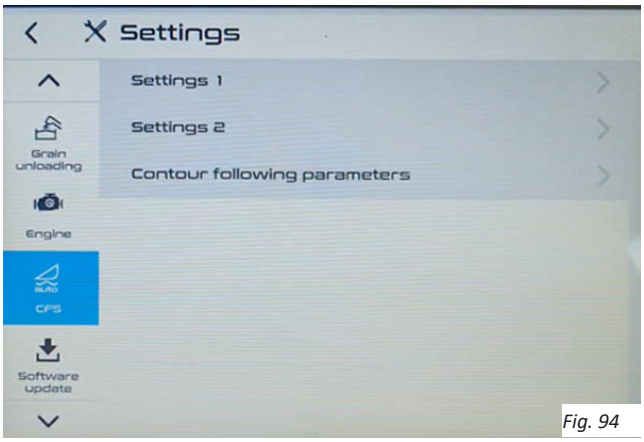


Fig. 94

4. Open the 'Settings 1' page and enter the following settings;

   Control mode:

   - Key 1: Maintaining of the cutting height
   - Key 2: Maintaining of the cutting height

   Contour following parameters:

   - Key 1: User settings 1
   - Key 2: User settings 1

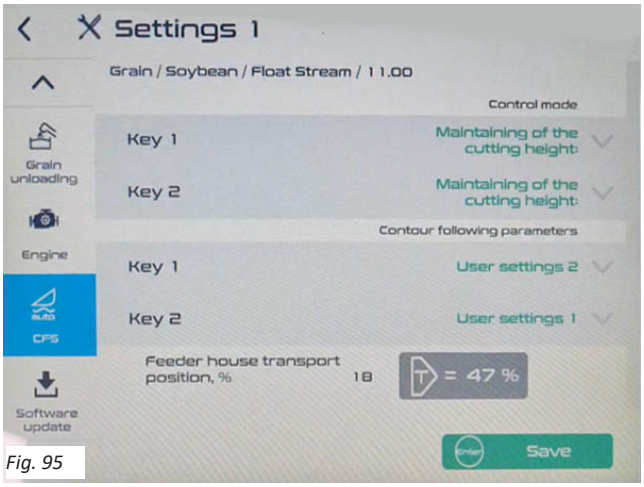


Fig. 95

5. Press the save button

6. Open the 'Settings 2' page. The values entered here will vary between different combine/header combinations. Start with the default factory settings and adjust if necessary.
   - Set the Feeder house slow lift current and slow lowering current so it takes 9 seconds to raise the header from its lowest point to its highest point.
   - Set the Feeder house fast lift current and fast lowering current so it takes 6 seconds to raise the header from its lowest point to its highest point.

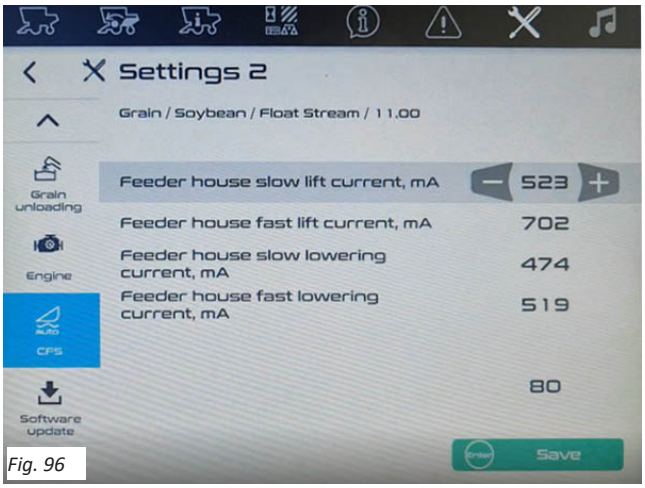


Fig. 96

7. Press the save button.
8. Open the 'Contour Following Parameters' page. The values entered here will vary between different combine/header combinations. The most important setting is 'Feelers sensitivty,%'. Start with the settings shown in the image below.

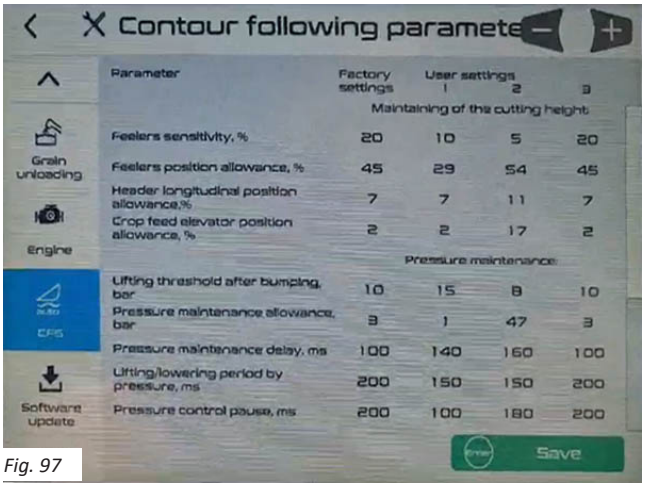


Fig. 97

   - If performance is unsatisfactory, try the 'User 1' settings shown to the right.

Fig. 100

9. Press the save button.
10. Scroll down and select the Calibrations page, then select 'CFS sensors'.

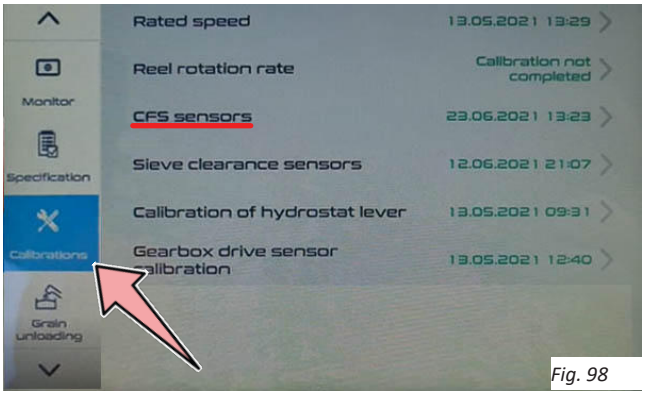


Fig. 98

11. Move the feeding house to the lowest position until you feel the slight bump. Press the Start button to start the calibration process.

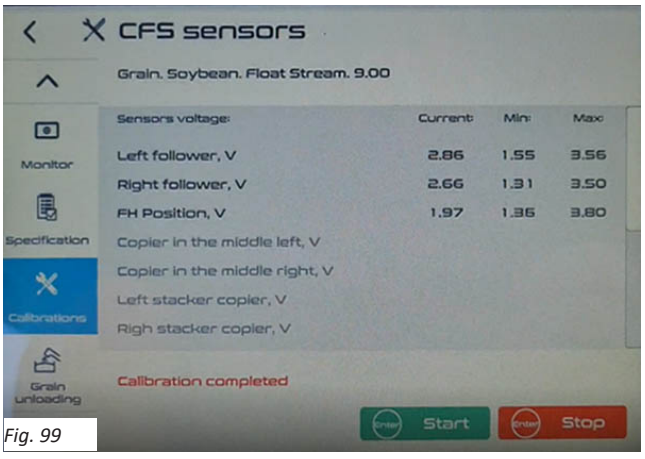


Fig. 99