# AXIAL-FLOW® 7230
# AXIAL-FLOW® 8230
# AXIAL-FLOW® 9230

Combine

# OPERATOR'S MANUAL

**Part number 47372498**
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CASE IH AGRICULTURE

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# FEEDING

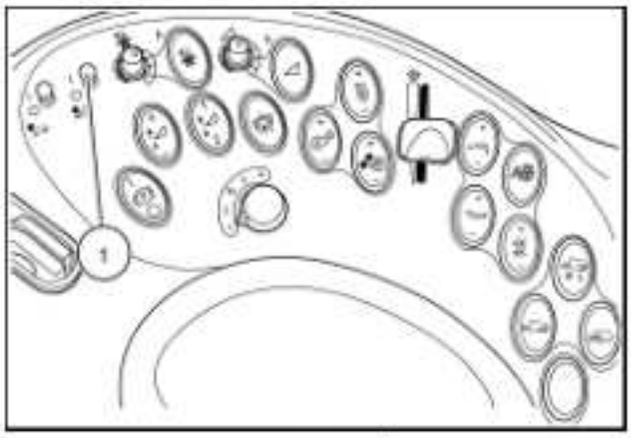
## Feeder

The feeder drive has very specific operating requirements and must operate in one of five modes at all times.

### Modes of operation

#### Off

Place the feeder control switch **(1)** into the center detent position, the feeder should not be powered and should be at rest.



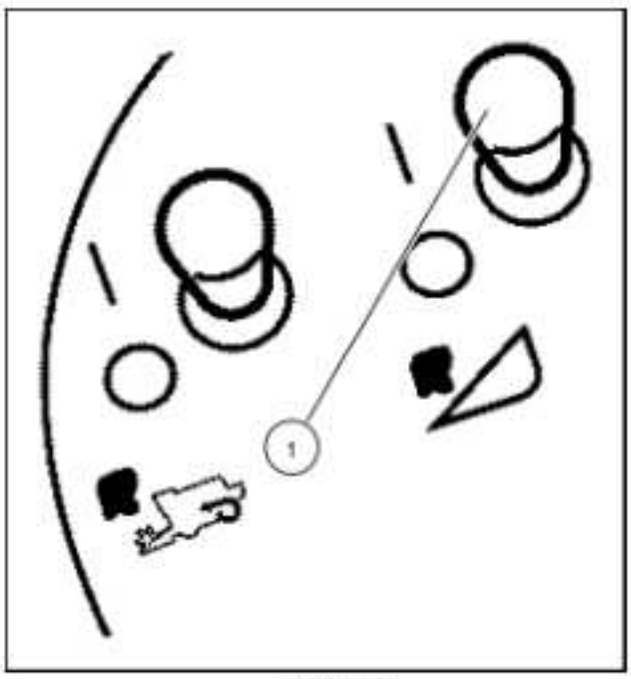

1

#### Feeder engagement

The feeder may be engaged at any time once the separator is operating and the feeder speed is below **50 RPM**.

The rear ladder must be in the up position and the operator must be seated.

Place the feeder control switch **(1)** into the forward detented position, the feeder will achieve the requested RPM within 5 seconds.




2



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# Engine mounted fuel filter

**⚠ WARNING**

**Avoid injury! Always do the following before lubricating, maintaining, or servicing the machine.**
1. **Disengage all drives.**
2. **Engage parking brake.**
3. **Lower all attachments to the ground, or raise and engage all safety locks.**
4. **Shut off engine.**
5. **Remove key from key switch.**
6. **Switch off battery key, if installed.**
7. **Wait for all machine movement to stop.**

**Failure to comply could result in death or serious injury.**

W0047A

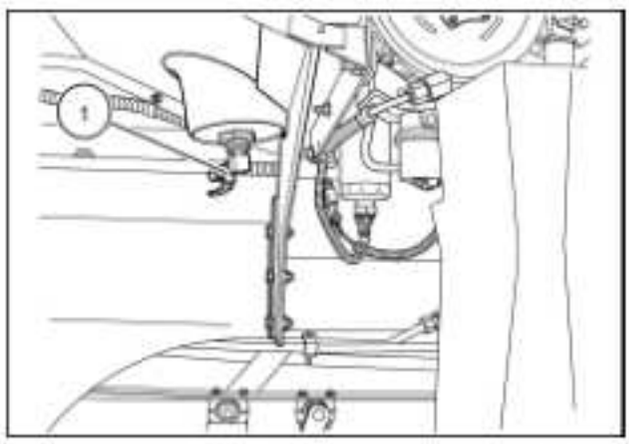
**⚠ WARNING**

**Fuel vapors are explosive and flammable.**
**Do not smoke while handling fuel. Keep fuel away from flames or sparks. Shut off engine and remove key before servicing. Always work in a well-ventilated area. Clean up spilled fuel immediately.**
**Failure to comply could result in death or serious injury.**

W0304A

The fuel filter should be changed every 600 operating hours. Proceed as follows:

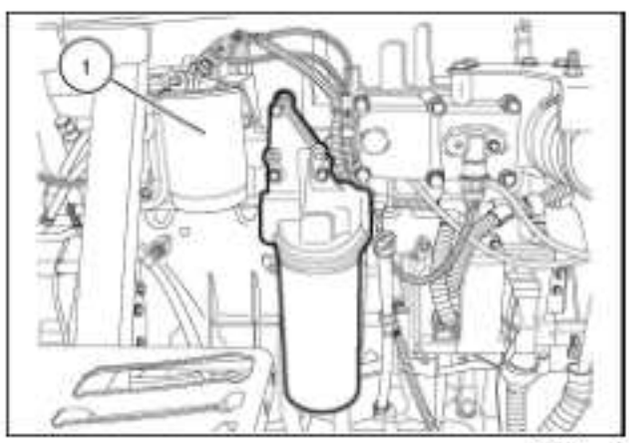
1. Close the fuel tank shutoff valve **(1)**.
2. Clean the filter housing and engine area around the filter.
3. Use a suitable container to catch any spilled fuel.




1

## 7230

4. Turn the filter counterclockwise to remove.
5. Remove and discard the old filter.
6. Install the new filter.
7. Turn the filter clockwise until the gasket contacts the filter head. Use your hand to tighten 1/2 of a turn.
8. Turn the key switch ON and allow the electric fuel pump to operate for approximately 2 minutes prior to starting the engine.
9. Bleed the air from the system, refer to **7-88**.




2



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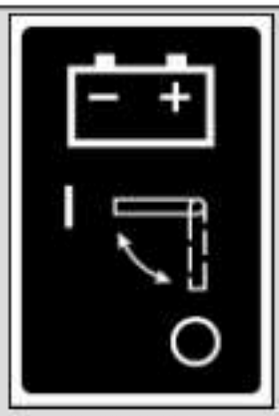
# Machine specifications

| | 7230 | 8230, 9230 |
|---|---|---|
| **Feeder** | | |
| Number of Chains | 4 | |
| Chain type | 557 HD | |
| Number of Slats | Units without rock trap 42 | |
| | Units equipped with rock trap 36 | |
| Slat type | Roll Formed Serrated U-Slat | |
| Driveline, fixed | Gearbox and Shaft | |
| Driveline, variable | Gearbox and Shaft-CVT | |
| Feeder Clutch | Friction | |
| Header Lift cylinders, diameter. | **75 mm (3 in)** | |
| | High capacity **90 mm (3.5 in)** | |
| Reverser System | Hydraulic | |
| Stone Trap (Opt.) | Beater/Sump | |
| **Threshing** | | |
| **Threshing Drive** | | |
| Drive Type | Gearbox and Shaft-CVT | |
| Rotor Speed Range | **220 - 1180 RPM** | |
| Speed Control | Electronic | |
| **Rotor** | | |
| Rotor Diameter | **762 mm (30 in)** | |
| Rotor Length | **2623 mm (103.3 in)** | |
| Length of auger section | **515 mm (20.3 in)** | |
| Length of threshing section | **886 mm (34.9 in)** | |
| Length of separation section | **886 mm (34.9 in)** | |
| Length of discharge section | **305 mm (12 in)** | |
| **Rotor** | | |
| **Corn** | | |
| Number of Non Spiked Rasp Bars | 56 | |
| Number of Spiked Rasp Bars | 8 | |
| High Alloy | No | |
| Number Straight Separator Bars | 4 | |
| Number Helical Separator Bars | 2 | |
| **Small Grain** | | |
| Number of Non Spiked Rasp Bars | 64 | |
| Number of Spiked Rasp Bars | 8 | |
| High Alloy | No | |
| Number Straight Separator Bars | 4 | |
| Number Helical Separator Bars | 2 | |
| **ST** | | |
| Number of Non Spiked Rasp Bars | 40 | |
| Spiked, High Alloy | Yes | |
| Number Helical Separator Bars | 2 | |
| **Rotor Modules** | | |
| Number of separating sections | 4 | |
| Number of threshing sections | 4 | |
| Clearance Range | **120 mm (4.7 in)** | |
| Wrap Angle | **180 °** | |
| Separation Concept | Centrifugal force | |



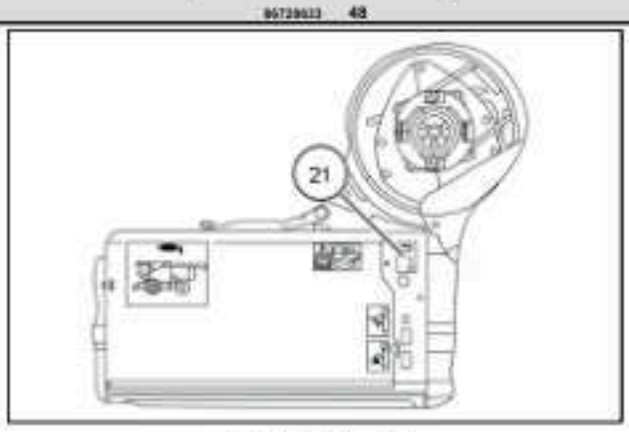
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**Battery disconnect switch**
**86729633**
**Quantity: 1**



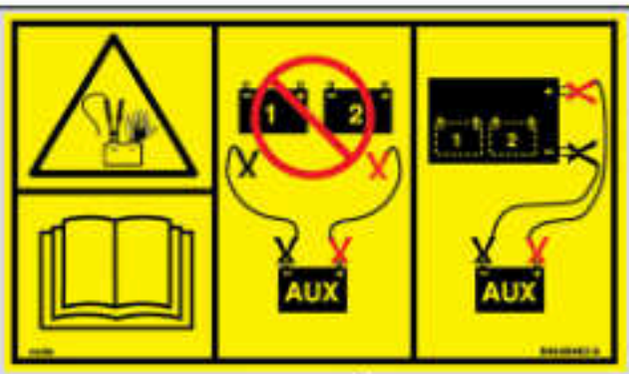
86729633 48

**(21)** Beside the battery disconnect switch



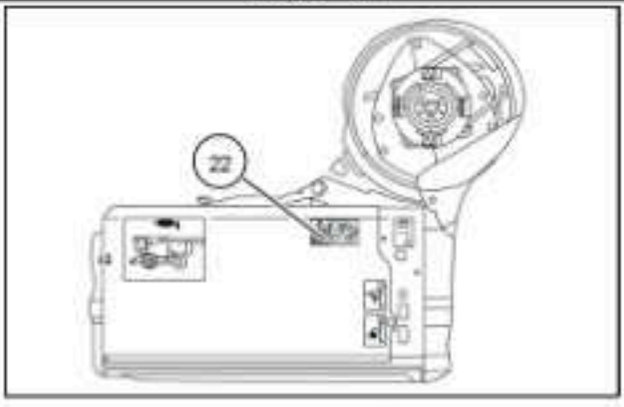

MHPE12AF000B9AA 49

**Correct battery boost procedure**
**84548463**
**Quantity: 1**




84548463_A 50

**(22)** On the tool box




MHPE12AF000B9AA 51



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# Header calibration

**⚠WARNING**

**Hazard to bystanders!**
**Equipment moves automatically during calibration. ALWAYS make sure work area is clear of other persons and sound the horn before calibrating the equipment.**
**Failure to comply could result in death or serious injury.**

W0015A

The new Header calibration procedure will be replacing the current:

- Feeder calibration
- Lateral Tilt calibration
- Ground Sensor calibration

All of these will now be completed in one HEADER calibration procedure.

The Header Calibration procedure learns the full travel of the feeder, lateral tilt and header ground sensors, as well as the electrical current required to activate the feeder raise/lower solenoids.

The resultant calibration data is stored in the CCM1 controller based on header type.

The data is recalled anytime the same type header is reattached to the machine.

***NOTE:*** *During the calibration procedure, automatic feeder movements will be done by the CCM1 controller. Take proper safety precautions.*

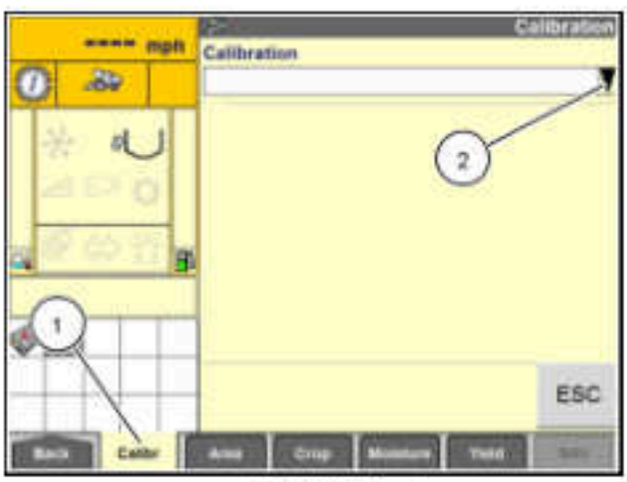
## Header calibration

***NOTE:*** *If any other MFH switches are pressed during the calibration operation, the procedure will be aborted.*

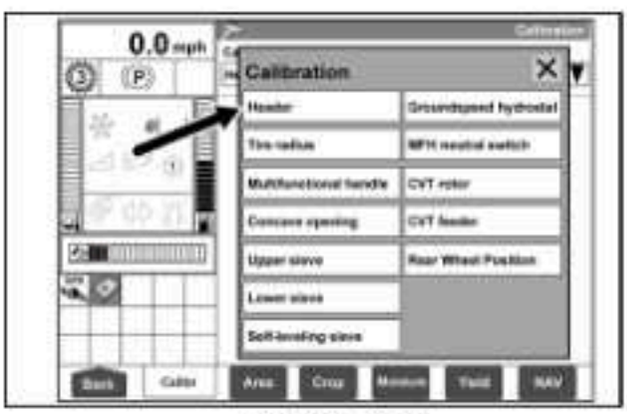
- Attach the proper header on the machine and verify that the feeder angle, tilt position and header ground sensors are functioning properly.
- Locate a flat area where the header can be lowered completely to the ground.
- Feeder must be turned OFF and the combine stationary.
- Position the header approximately **31 cm** (**12 in**) above the ground. The header must be able to go down when the calibration is started.
- Level the header so it is parallel with the feeder.

Using the display start the calibration procedure.

1. Press Calibration **(1)**
2. Press the down arrow to open the selection box **(2)**.
3. Press the HEADER button.




NH5C12AF00316AA 1




NHFE12AF00771AA 2



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| Ballast Weight kg (lb) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Header Type & Size | 2010 Rigid Auger Head | | | 3016 Pickup Head | | 3020 Flex Auger Head | | | | 2142 Rigid Draper | | | 2152 HD Rigid Draper | | | | | 2162 & 3162 Flex Draper | | | | 3162 Flex Draper with Transport | | | | 3400 Corn Head | | 2600 Chopping Corn Head | | |
| | 20' | 25' | 30' | 12' | 15' | 20' | 25' | 30' | 35' | 25' | 30' | 35' | 25' | 30' | 35' | 40' | 45' | 30' | 35' | 40' | 45' | 30' | 35' | 40' | 45' | 8 Row | 12 Row | 8 Row | 8 Row F | 12 Row |
| Steer Tires | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 540/65R30 150A8 R1W with HDASA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | 160 (350) | X | | | X | | | X | | | |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 690 (1520) | X | | 515 (1135) | 1040 (2290) | X | | X | | 440 (970) |
| 540/65R30 150A8 R1W with PRA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | | X | | 225 (495) | X | X | | X | | 120 (265) |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 340 (750) | X | | | 715 (1575) | X | | X | | |
| 600/65R28 154A8 R1W with HDASA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | 80 (175) | X | | | X | | | X | | | |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 625 (1375) | X | | 450 (990) | 975 (2145) | X | | X | | 375 (825) |
| 600/65R28 154A8 R1W with PRA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | | X | | 160 (350) | X | X | | X | | 40 (90) |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 275 (605) | X | | | 650 (1430) | X | | X | | |
| 600/70R28 161A8 R1W with HDASA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | 80 (175) | X | | | X | | | X | | | |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 625 (1375) | X | | 450 (990) | 975 (2145) | X | | X | | 375 (825) |
| 600/70R28 161A8 R1W with PRA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | | X | | 160 (350) | X | X | | X | | 40 (90) |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 275 (605) | X | | | 650 (1430) | X | | X | | |
| 750/65R26 166A8 R1W with HDASA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | | X | | | X | X | | X | | |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 480 (1055) | X | | 305 (670) | 830 (1825) | X | | X | | 230 (505) |
| 750/65R26 166A8 R1W with PRA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 160 (350) | X | | | X | X | | X | | |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | | X | | | 505 (1110) | X | | X | | |
| 28L-26 16 PR R2 with HDASA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | | X | | | X | X | | X | | 160 (350) |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 425 (935) | X | | 250 (550) | 775 (1705) | X | | X | | |
| 28L-26 16 PR R2 with PRA Axle | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wheel Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | 80 (175) | X | | | X | X | | X | | |
| Liquid Weight | X | | | X | | X | | | | X | | | X | | | | | X | | | | X | | | 450 (990) | X | | X | | |

Note:

1 - X = ballast not required.

2 - NA = tires not approved.

3 - For liquid ballast, use 3.5 lb (1.6 kg) of calcium chloride per 1 gallon (3.8 L) of water and fill to specified weight. Do not exceed 75% fill. Values shown are total, use half this amount in each tire.

4 - For wheel weights, values shown are total, use half this amount on each steer wheel.

5 - Ballast requirement above, applies for all drive tire sizes including tracks.



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