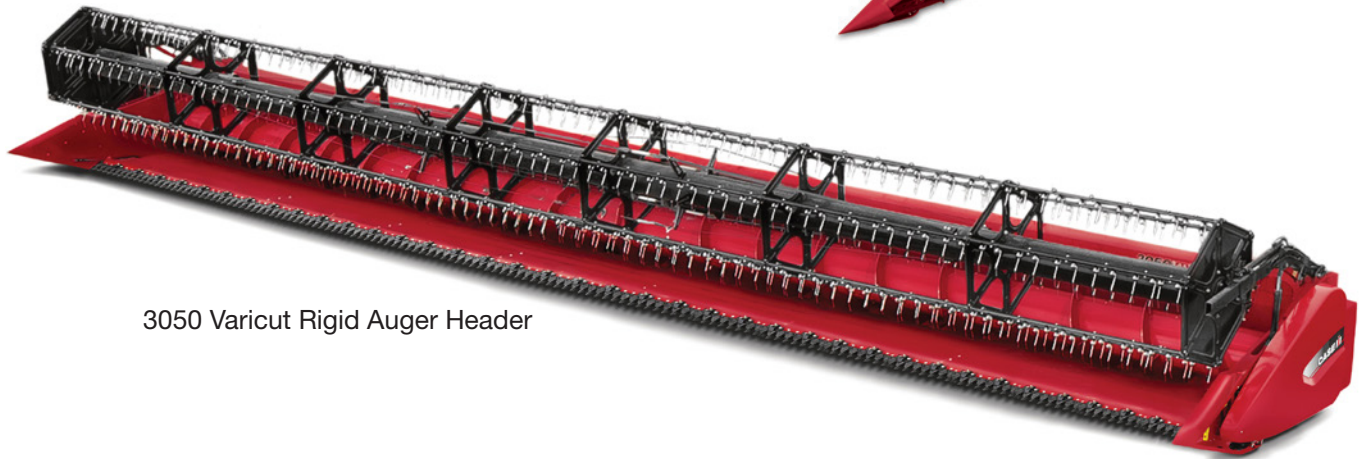


# 2030 Rigid, 3050 Varicut Rigid and 3020 TerraFlex™ Headers



2030 Rigid Auger Header



3050 Varicut Rigid Auger Header



3020 TerraFlex Auger Header

## 2019 CASE IH AXIAL-FLOW® COMBINE AUGER HEAD PRODUCTIVITY GUIDE

## GENERAL INFORMATION

### INTRODUCTION

For 42 years, Case IH Axial-Flow® combine owners have capitalized on the foremost harvesting technology, gathering their crops in the finale of each season of investment, planning, hours of hard work; putting their very being into reaping the bounty of the land.

Throughout the history of Axial-Flow combines, tremendous gains in combine efficiency, capacity and reliability have placed ever-increasing demands on grain heads. While crop yields, and thus material volumes, have increased over the years; the demand for wider and more efficient heads has continued to grow right along with combine capacity. A vast volume of material must be gathered and fed smoothly into the combine to satisfy the hunger of these industry-leading machines.

A wide selection of auger headers are available to compliment the features of current Axial-Flow combines. Rigid model 2030 headers are available in four sizes from 17 to 30 feet for standing crops such as wheat and other small grains. Farmers with soybeans and other low hanging crops require a ground-hugging flexible cutter bar, and can choose from one of four sizes of model 3020 heads, spanning 20 to 35 feet.

The newest member to the Axial-Flow combine header family is the 3050 Varicut header. This header is gaining in popularity especially in the canola market. It is also a great header when comes to many other small grain crops. The header is available in 30, 35 and 41 foot sizes.

Current model Case IH auger headers offer hydraulic reel lift and reel drive as standard equipment in addition to other options such as dividers that fit your specific cropping needs.

Full fingered augers promote positive feeding on 25 and 30 foot 2030 rigid heads and all 3020 flexible auger heads. A large 26-inch diameter auger sweeps crop along the steel auger trough to the combine feeder housing.



### 2030 RIGID AUGER HEAD

Model	Cutting Width	Single Knife Drive
2030	17 ft.	Standard
2030	20 ft.	Standard
2030	24 ft.	Standard
2030	30 ft.	Standard

### 3020 TERRAFLEX AUGER HEAD

Model	Size (ft.)	Knife Type
3020	20, 25, 30, 35	Single
3020	30, 35	Double

### 3050 VARICUT RIGID AUGER HEAD

Model	Cutting Width	Knife Drive
3050	30 ft.	Single
3050	35 ft.	Single
3050	41 ft.	Double

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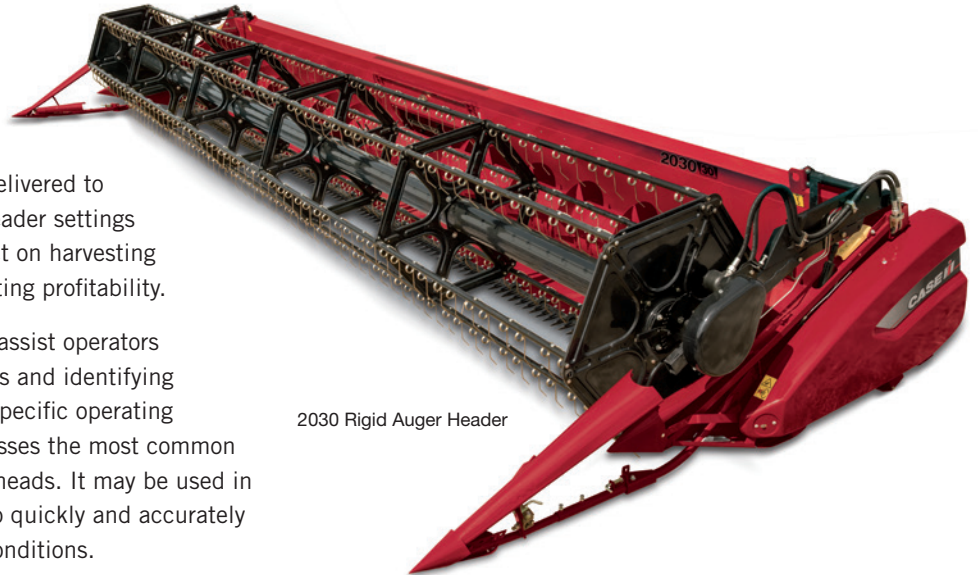


# GENERAL INFORMATION

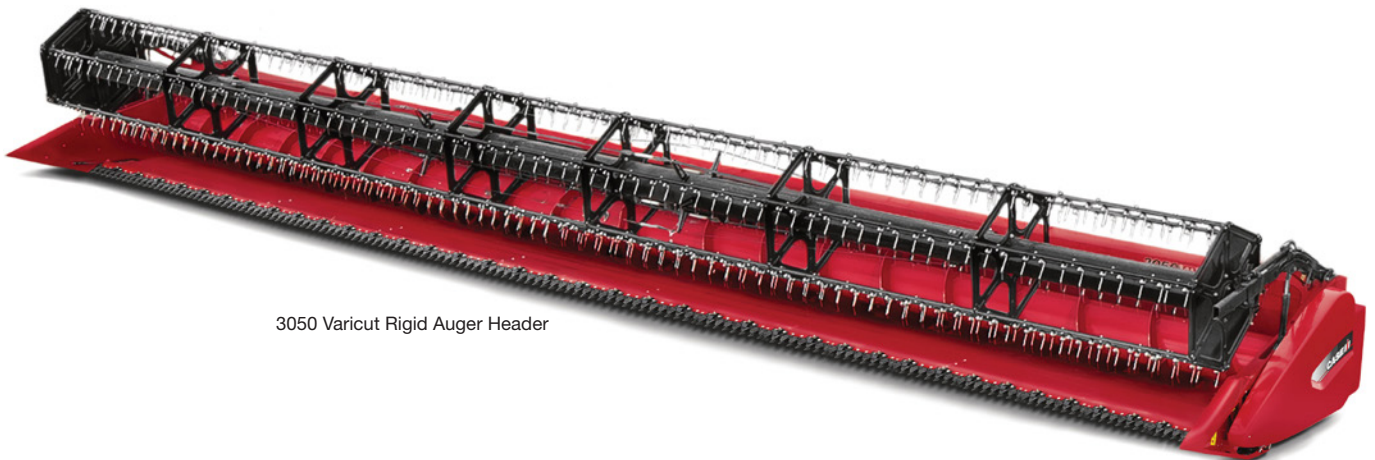
## INTRODUCTION (CONTINUED)

Traditionally, great attention is devoted toward combine threshing and separating adjustments during a performance evaluation. The operator wants the crop to be thoroughly threshed and cleaned, and every kernel delivered to the grain tank. The impact of incorrect header settings and operation can have a significant effect on harvesting efficiency, and ultimately customer operating profitability.

The Operator's Manual is the best tool to assist operators in evaluating performance, isolating issues and identifying adjustments to best suit the machine in specific operating conditions. This Productivity Guide addresses the most common questions operators have affecting auger heads. It may be used in conjunction with the Operator's Manual to quickly and accurately evaluate and adjust to a wide variety of conditions.



2030 Rigid Auger Header



3050 Varicut Rigid Auger Header



3020 TerraFlex Auger Header

## SAFETY

Combines and auger heads employ the use of aggressive gathering, cutting and conveying components that could potentially injure operators or bystanders. The operator must understand and recognize this potential and be constantly aware of their responsibility to keep harvest time a safe and productive season. The best way to assure safe operation is to remember the basic safety rules which apply to all machine operation, and specifically to harvesting equipment. The specific rules of safe operation are included in the machine's Operator's Manual and should be reviewed prior to each season of use. The basic rules for combine and combine header operation are:

- When servicing the machine, make accidental contact or entanglement with moving parts impossible by disengaging all drives and stopping the engine before starting service work. This rule applies to all circumstances such as adjustment, repairs, or unplugging the machine. Keep the work area clean and free of hazards.
- Prior to working under or near the combine header, either lower the header completely to the ground, or raise the header completely and lower the header safety stop or stops on the combine feeder lift cylinders (see figure 4.1).

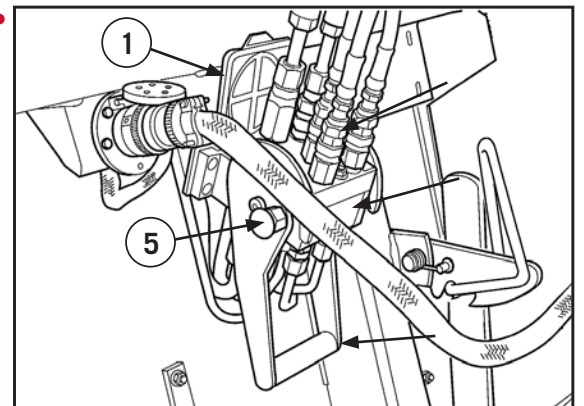
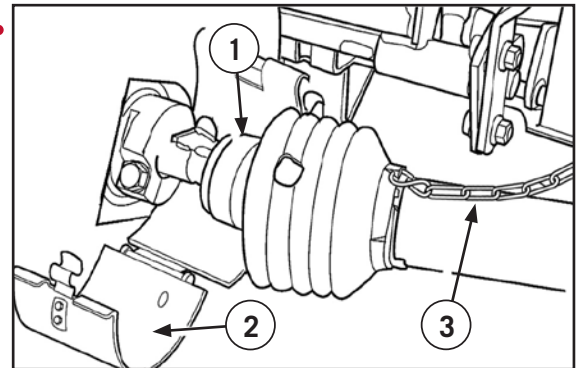
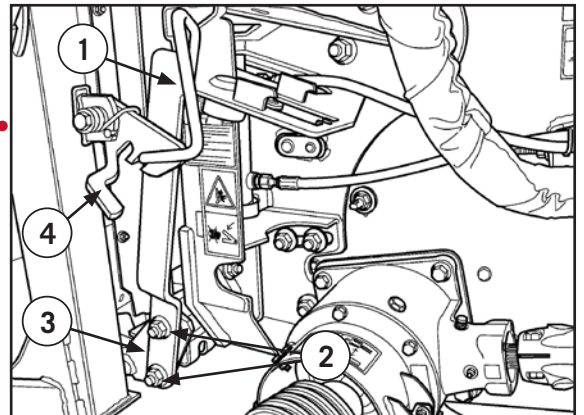
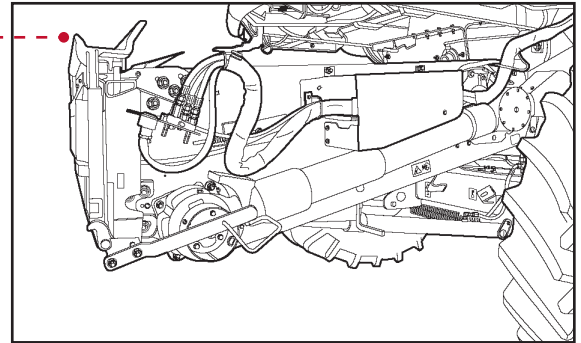


Figure 4.1

- **DO NOT** go under the *feeder* OR *header* without the safety stop engaged **AND** the header securely latched to the combine feeder.
- Make sure the area around the machine is clear of other workers, vehicles, equipment, and tools before starting the combine or header. Leave the cab door open and sound the horn as a warning to others, then wait a few seconds for response before starting the machine.
- During operation, maintain the safest possible work environment by keeping all guards and shields in place and in good condition as intended by the manufacturer. **DO NOT** allow riders on the machine.
- Observe and be knowledgeable of the warning decals placed on the machine in specific areas. See your Case IH dealer for replacement decals, should they become damaged or worn and unreadable.
- To maintain optimal steering control and machine balance, the rear axle of the combine must be adequately ballasted according to the size and weight of the header. Refer to Operator's Manuals for minimum ballasting requirements for specific combine and header configurations. Operating conditions such as hilly or uneven terrain may require additional ballast for best control.
- When transporting the machine on public roads, at any time of day, make sure all safety warning lights provided with the machine and/or required by local statute are functioning properly for maximum visibility of the machine to other motorists. Make sure the (SMV) slow-moving vehicle sign is clean, in good condition and visible to the rear of the machine. Observe the rules of the road and be a good neighbor. When safe to do so, move over and allow traffic to pass.
- Remove the header and transport on a trailer to reduce obstruction to other traffic, and for overall safer transport. A few minutes to remove and properly transport the head, even a short distance, is better than spending hours dealing with an accident or an eternity living with the consequences.

# HEADER INSTALLATION

1. Make sure the feeder cradle is clean: - - - - -
2. Position the combine to align feeder and header opening.
3. Hook on the header, and raise the feeder to lift head.
4. Attach quick-attach lever (1) so that the hooks (3) are in full contact with pins. If not, adjust lever (1) with bolts (2) so that some resistance is felt when latch (4) is engaged over lever (1).
5. Connect header drive shaft (1), and close the cover over the coupling (2).
6. Connect PTO shaft chains to correct mounts on header frame (3).
7. Clean hydraulic coupler surfaces to prevent dirt from entering the hydraulic system.
8. To connect the quick-release coupler, open cover (1), bring the combine hydraulic block (2) to the header hydraulic block (3) and turn down handle (4) until lock (5) jumps into its security groove.
9. Connect electrical connector plug.



## MAINTENANCE

Interval	MAINTENANCE ACTION	Grease	Tighten	Change Fluid	Check	Lubricate
Every 10 Hours	10 hours grease fittings	•				
	Retractable auger tine lubrication	•				
Every 50 Hours	Knife drive gearbox oil level				•	
	Header drive					•
Every 100 Hours	100 hours grease fittings	•				
Every 200 Hours	Auger drive slip clutch lubrication	•				
Every 300 Hours	Pivot points					•
Every 600 Hours or Annually	Knife drive gearbox oil change			•		
	FRAME AND CAB					•

MAINTENANCE ACTION	Lubricate	Change Fluid	Grease	Check	Replace	Adjust
<b>DAILY</b>						
Chains	•					
<b>EVERY 10 HOURS OR DAILY</b>						
Retractable auger tines	•					
Drive chain	•					
Drive belts and chains	•					
<b>AFTER FIRST 50 HOURS</b>						
Knife drive gearbox		•				
<b>EVERY 50 HOURS</b>						
Grease points			•			
Knife drive gearbox				•		
<b>EVERY 600 HOURS OR ANNUALLY</b>						
Knife drive gearbox		•				
<b>ONCE PER SEASON</b>						
Threaded rods	•					
<b>AS REQUIRED</b>						
Knife drive belt					•	
Auger finger replacement					•	
Knife replacement					•	
Finger guard						•



# MAINTENANCE

## GENERAL MAINTENANCE

The sickle or knife drive is typically a V-belt system, driven from the main header driveshaft. Designs used on various models have specific adjustment requirements. For example, in some cases the V-belt system is used as the drive protection slip clutch for the knife drive, making correct adjustment especially critical.

Regular inspection of the belt, pulleys and surrounding area for signs of excessive wear and slippage is necessary to ensure long belt life and trouble-free operation (see figure 7.1). Additional suggested belt maintenance includes keeping the belt clean and free of any oil or grease which may be thrown onto the belt from other components.

Belt dressings are not recommended, as they offer only temporary correction of slipping tendencies and often lead to shortened belt life. When the belt drive is used as an overload protection, belt dressings can have a detrimental effect, and may result in damage to other components.

Belt slippage simply is most often caused by wear that has narrowed the belt “V” section, or increased the “V” section of the pulleys. This reduces the gripping and traction effect of the “V”, and lowers the belt system capacity to the point when slippage occurs. Replacement of the belt and other worn components is the only suitable correction.

Chains and sprockets used to drive the reel and auger should be inspected for proper tension as specified in the Operator’s Manual (see figure 7.2). Lubrication such as chain lubricants or SAE 30 engine oil may be used on chain drives. However, keep in mind that once a chain is lubricated, it will likely attract a greater degree of contamination, and will require consistent lubrication from that point, throughout the life of the chain. Regular lubrication flushes contaminants from the chain and provides protective lubrication.

Lubricating chains at the end of the workday while the chain is still warm permits the oil to flow freely into critical areas. When the oil cools and sets, it is less likely to be thrown off the chain at start-up the next day.

## SICKLE

The sickle knife and the knife drive system work hard on the combine header (see figure 7.3). In addition to cutting a large volume of crop stalks, occasional weeds with thick, woody stems present even greater challenges to the system. The environment in which the knife operates is often very severe, especially in applications such as soybeans or edible beans where the knife is likely cutting right at ground level, exposing the knife to considerable soil and abrasives.

*Continued on next page*



Figure 7.1



Figure 7.2



Figure 7.3

## MAINTENANCE

### SICKLE (CONTINUED)

Several adjustments are necessary to ensure efficient cutting, with minimal power requirement, vibration and component wear. Some variations in knife design over the years again dictate specific reference to Operator's Manuals for exact inspection and adjustment criteria. However, reviewing some of the basics of knife inspection and adjustment will be helpful in applying the specifics pertaining to your particular header model.

The primary element in sickle knife adjustment and maintenance is to confirm sickle knife sections are in correct alignment with the back rib bearing area, and the forward ledger surface of the guard. The "Proper Guard Maintenance" illustration (see figure 8.1) shows the correct orientation of the sickle sections with the bearing areas of the guard. Rib "A" supports the rear of the sections, and the knife portion of the section lies flat on the ledger surface, "B." This promotes optimum shearing action for the most efficient cutting, with the least power requirement and vibration. The hold-down clips "C" are adjusted to hold the forward part of the section on the ledger, allowing the lip on the forward portion of the guard "D" to remain straight, maintaining a slight clearance to the top of the knife.

Bending adjustments to the guards are illustrated in Operator's Manuals and are used to maintain correct sickle knife and guard alignment.

Common mis-adjustments are shown in the "Improper Guard Maintenance" illustration (see figure 8.1). The rear of the section is supported by the back rib. However the tip of the guard is low, and does not provide a level ledger surface on which the knife can ride and provide an efficient shearing action. To prevent interference and binding, the guard tip is often bent upward, while the section hold down clips may be improperly adjusted, allowing the section to move vertically over the ledger area. The result is poor cutting, with high power requirement and excess vibration.

Many wider heads are equipped with counter-stroking double sickle knives that are driven for from both ends of the head. Overlapping sections in the center of the head are accomplished by orienting the right sickle approximately 1/8 inch above the left. Special sections with countersunk hardware allow mating sections to slide over one another, free of interference. Proper shimming is therefore critical to allow the sickles to run straight and to slide smoothly as the sickles reciprocate.

The correct shimming methods are illustrated in Operator's Manual drawings, explaining the correct shimming operations necessary to achieve proper knife operating clearances and alignment (see figure 8.2).

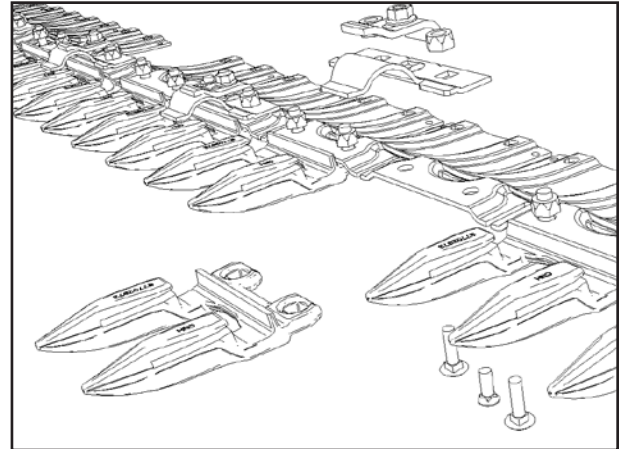


Figure 8.1

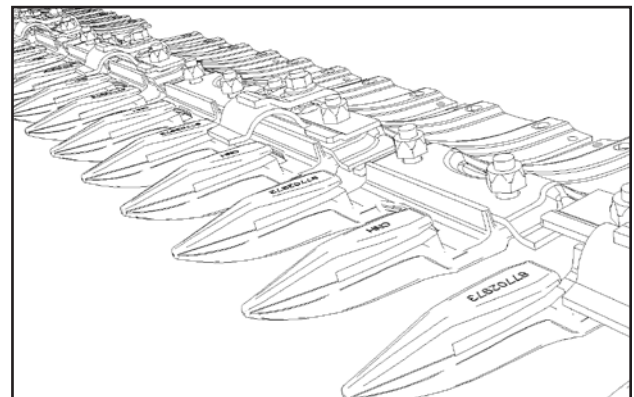


Figure 8.2



# MAINTENANCE

## SICKLE DRIVER MAINTENANCE

The “wobble box” sickle driver on Case IH auger grain heads may use an external bent axis camshaft, or a fully enclosed gearbox with oil bath lubrication, to oscillate the sickle drive yoke. The knife drive is belt driven, and overload protection is provided in the form of calculated drive belt slippage (see figure 9.1).

Typically, the open shaft design uses sealed, or greaseable bearings, that should be maintained in accordance with the Operator’s Manual lubrication section. A 50 hour oil level check interval, with annual oil change is typically specified for enclosed wobble box drives.

An important aspect of knife drive adjustment is the vertical position of the drive arm relative to the sickle guards. Alignment is correct when the sickle sections glide smoothly across the ledger portion of the guards and are not forced upward or downward by their connection to the knife drive arm. Adjustment on some heads is performed by loosening the drive and moving it vertically in slotted holes. On other heads, the knife drive bushing clamp bolt is loosened, and the bushing is moved up or down in the arm to position the knife head in alignment with the drive arm and guards (see figure 9.2).

Knife register, or the orientation of the horizontal travel of the knife relative to the guards, may also have limited shimming adjustment. See the Operator’s Manual for specific information.

## EXTRA SICKLE

In addition to proper alignment, maintaining a sharp sickle is the most important part of maintaining efficient cutting. Many heads are equipped with a storage location for an extra sickle (see figure 9.3), making it convenient to replace the sickle during operation. Sickle replacement is generally suggested when operation dulls the sickle and results in a noticeable increase in header vibration, noise and inefficient cutting.

## AUGER MAINTENANCE

Auger hand opening covers should be removed, and auger fingers should be inspected on an annual basis. Lubricate nylon bearings as part of a pre- or post-season inspection (see figure 9.4).

During harvest, operators should visually inspect fingers and observe them during operation. Any questionable movement should be investigated to avoid an incident in which a finger is lost and ingested into the combine.



Figure 9.1



Figure 9.2



Figure 9.3

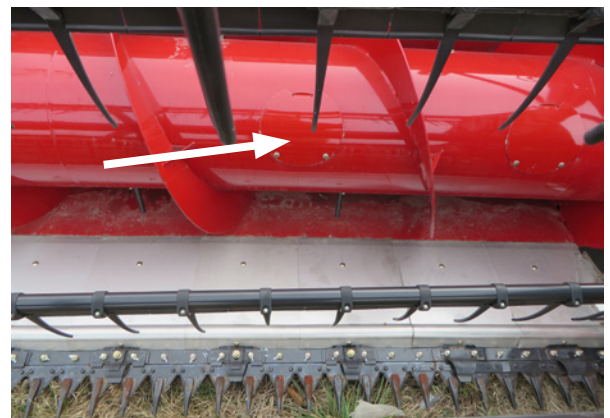


Figure 9.4

## TROUBLESHOOTING

### IRREGULAR FEEDING

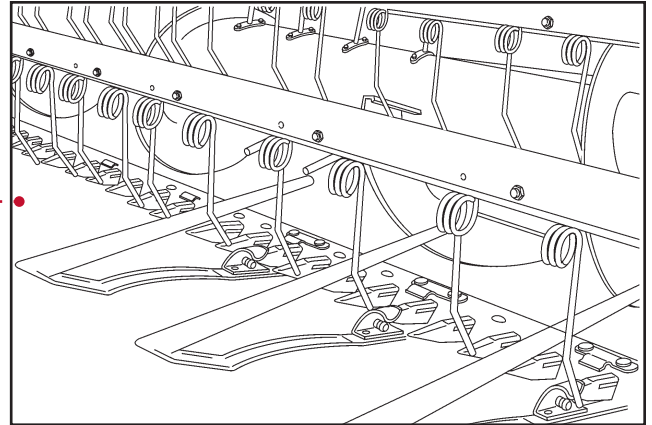
PROBLEM	POSSIBLE CAUSE	CORRECTION
<b>Cut crop builds up and falls in front of cutterbar</b>	Reel not set low enough for proper delivery of cut material	Set reel to sweep material from the cutterbar to the auger
	Clearance between feed auger flights and trough incorrect	For normal operation, the auger flights should be set approximately 1/2 inch (12 mm) from the feed auger trough; in heavy crops this distance should be increased slightly and in light crops it may be necessary to decrease the distance
<b>Poor cutting action (ragged and uneven)</b>	Cutterbar not operating at correct speed	Check combine speed – Make sure all belts are properly tightened
	Knife sections, hold-down clips or finger guards worn, damaged or broken	Replace all worn, damaged or broken parts
	Bent knife causing binding	Straighten knife and check finger alignment – align if necessary
	Hold-down clips not adjusted properly	Adjust hold-down clips so knife works freely but knife sections do not lift off finger guards
	Ground speed too fast for crop condition	Reduce ground speed of combine
<b>Material wrapping around the reel</b>	Reel speed too fast	Reduce reel speed so material will fall onto the cutterbar – Reel speed should turn slightly faster than ground speed
	Reel not being operated at correct height	Reel should be adjusted so it contacts 1/3 of the top portion of the head and stem
	Too much pitch on reel tines	Reduce pitch of tines
<b>Material wrapping around the feed auger</b>	Feed auger set too far from the stripper plates	Adjust auger more to the rear or adjust the stripper plates
	Auger retractable tines do not release the material	Adjust the auger retractable tines
	Feed auger is set too high	Lower feed auger
	Soil in header	Clear out soil
<b>Difficulty harvesting down crops</b>	Necessary to take too much material into the combine to get all the grain	Reduce ground speed of combine
	Need to cut too low to get all the crop	Install optional crop lifters or make more use of reel to pick up the crop
<b>Irregular feeding into the combine straw elevator</b>	Crop accumulates in front of the knife and enters the auger in bunches	Set the reel lower
	Feed auger retractable fingers do not feed the material properly	Check adjustment of feed auger retractable fingers
<b>Blockage of auger and/or combine components</b>	Irregular feeding	Adjust reel and feed auger retractable fingers as recommended in the Operator's Manual
		Adjust auger height
		Check knife drive area for loose, excessively worn or damaged parts – replace and adjust as recommended in the Operator's Manual
<b>Grain loss at cutterbar</b>	Excessive agitation of crop by the reel	Adjust reel so that the crop is moved smoothly to the cutterbar and auger
	Reel speed too high in relation to ground speed	Adjust reel speed so that the reel turns only slightly faster than the ground speed
	Reel not being operated at the correct height	Reel should be normally adjusted so that it contacts approximately 1/3 of the top portion of the head and stem, of the crop
	Reel speed too high in relation to crop condition	Reduce ground speed of combine
<b>Excessive shelling of grain in center of feed auger</b>	Feed auger speed too fast	Install optional 68-tooth auger sprocket to reduce auger speed
<b>Excessive cracked grain</b>	Bent or damaged feed auger flighting, shafts and/or housings	Inspect feed auger flighting, shafts and housings – replace or repair damaged parts
<b>Material feeding too far to the center of the straw elevator opening</b>	Crop is transported too far to the center of the header	Remove auger flight extensions
<b>Material feeding not far enough to the center of the straw elevator opening</b>	Crop is not transported far enough to the center of the header	Install auger flight extensions
		Install crop distribution plates
		Remove auger retractable fingers at side of opening

**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

# ACCESSORIES

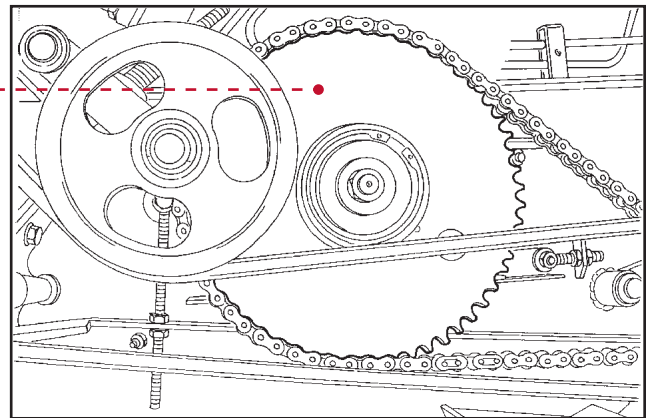
## CROP LIFTERS (2030 HEADER)

These can be installed to reduce cutterbar losses in laid or difficult to harvest crops and/or stony conditions.



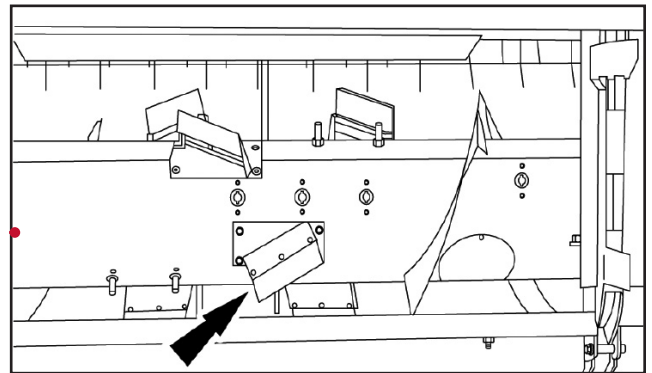
## AUGER SPEED RANGE (2030 HEADER)

The standard 58-tooth sprocket can be replaced by a 68-tooth sprocket of the feed auger to decrease the auger speed and reduce the shelling or threshing effect of the auger, e.g., in beans, long straw crops, rice, etc.



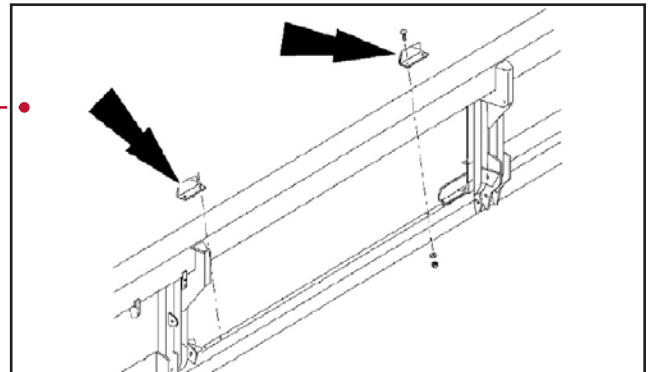
## SWEEPER (2030 HEADER)

Sweepers can be installed on the auger at the middle section to improve crop flow of short straw crops from the auger to the straw elevator.



## CROP DISTRIBUTION (2030 HEADER)

This kit improves the feeding by moving crop into the center of the feeder house.



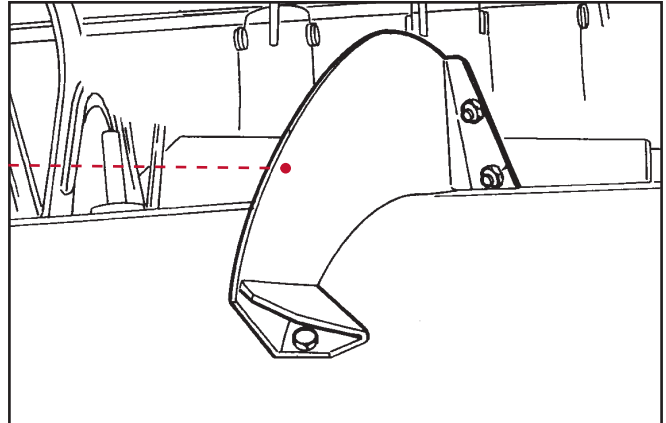
**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.



## ACCESSORIES

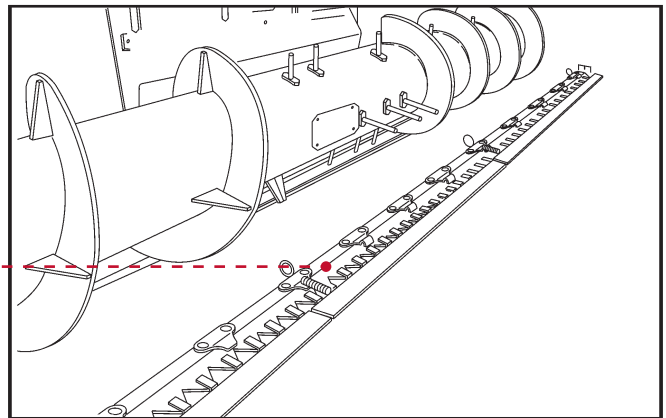
### AUGER FLIGHT EXTENSIONS (2030 AND 3020 HEADERS)

To feed the crop more to the center, auger flight extensions can be installed.



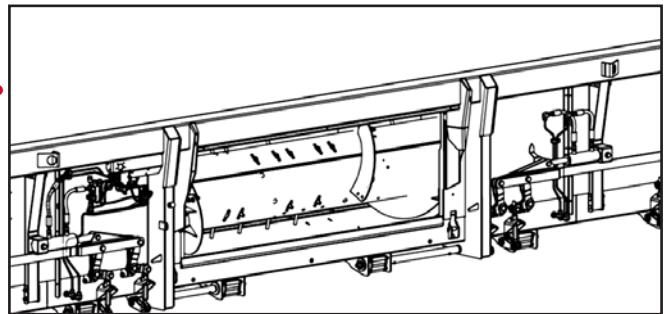
### KNIFE PROTECTION GUARDS (2030 HEADER)

When driving on public roads (with the header attached to the combine - maximum width not exceeding local regulations), knife guards are recommended.



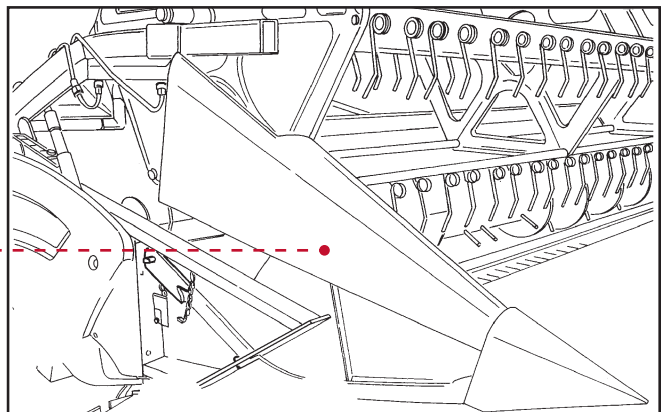
### HYDRAULIC FLOTATION ADJUSTMENT KIT (3020 HEADER)

A hydraulic flotation kit can be installed to convert header from standard flotation to hydraulic flotation. Float adjustments can be made from inside the combine cab.



### LONG DIVIDER (2030 HEADER)

Short dividers are used mainly for operation in rice fields and/or fields with raised borders.

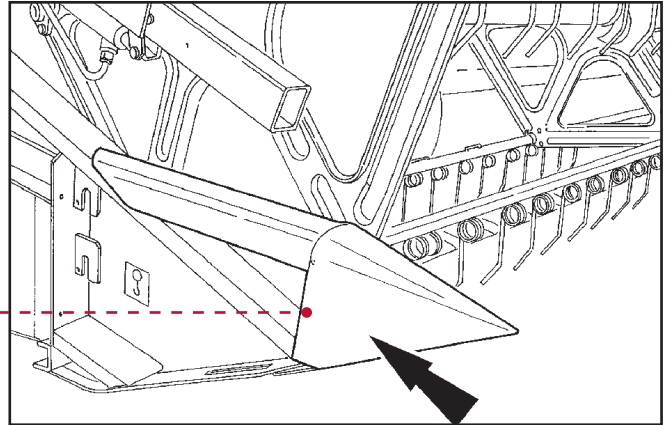


**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

# ACCESSORIES

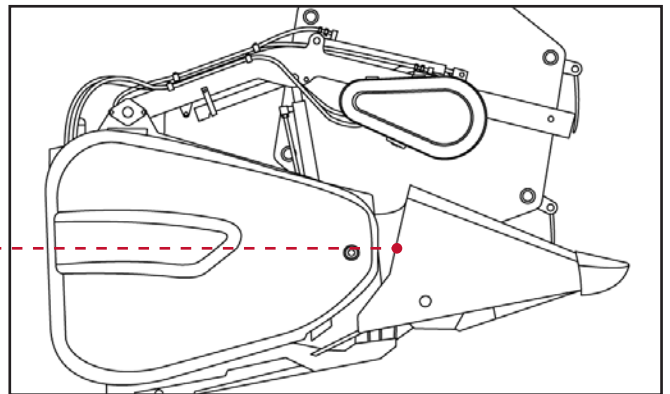
## SHORT FIXED DIVIDER (2030 HEADER)

Short fixed dividers are bolted on both sides of the header.



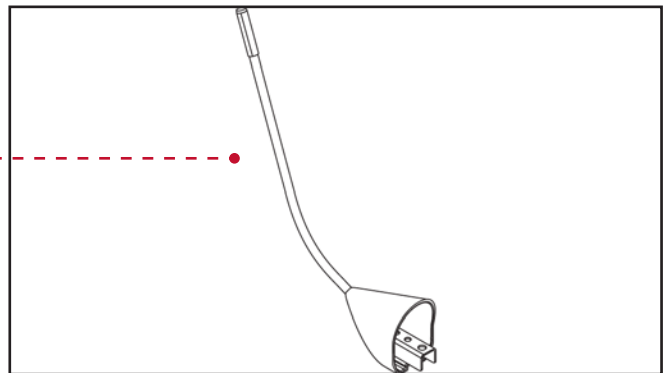
## LONG DIVIDERS (3020 HEADER)

Long dividers are highly efficient in crops with long straw.



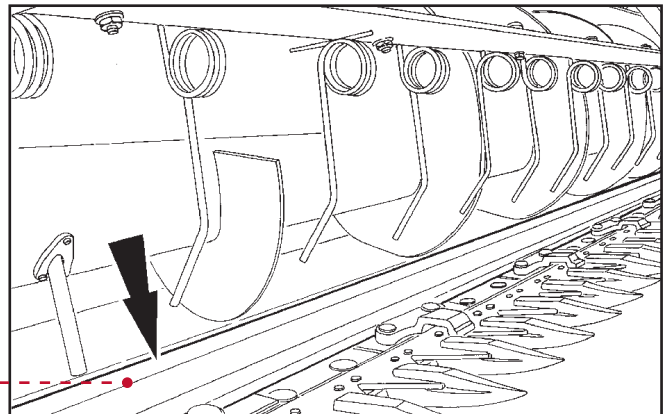
## ROD DIVIDERS (3020 HEADER)

Rod dividers are bolted on both sides of the header.



## STONE PROTECTION DAM (2030 HEADER)

To prevent the header from picking up stones, a stone protection dam can be installed.

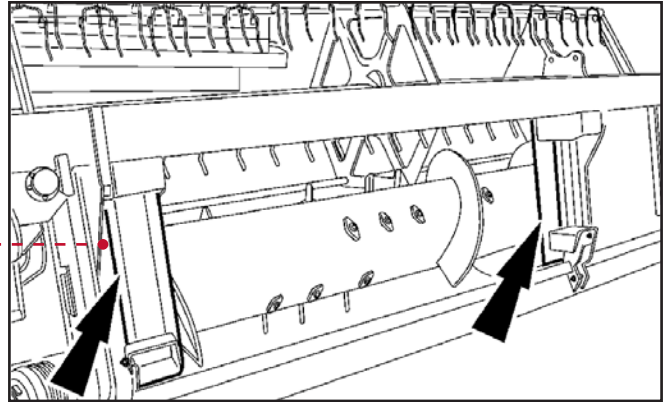


**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

## ACCESSORIES

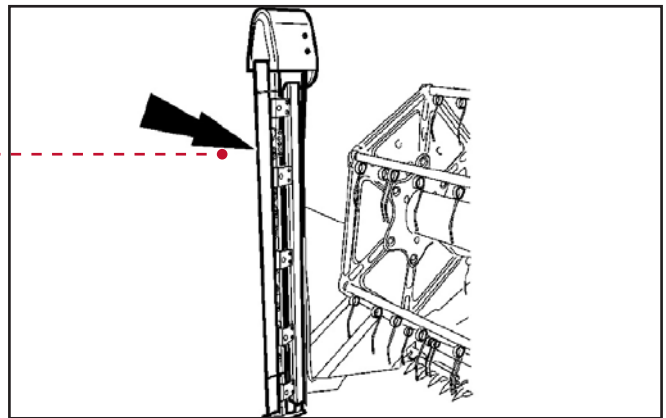
### FILLER PLATES (2030 HEADER)

Filler plates can be ordered to narrow the straw elevator opening, if necessary (not available on 30 foot).



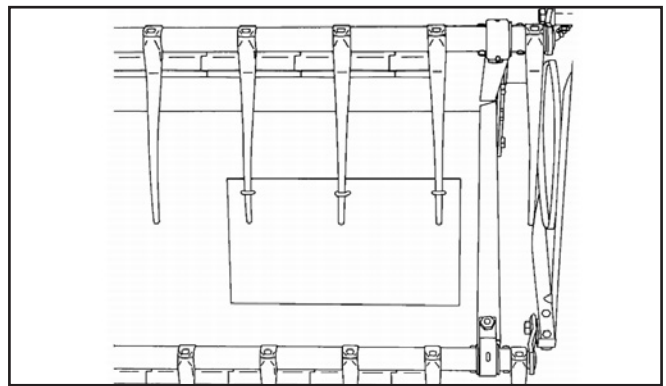
### VERTICAL KNIFE (2030 HEADER)

Electrical vertical knife kit left and/or right-hand side electrical vertical knives are available.



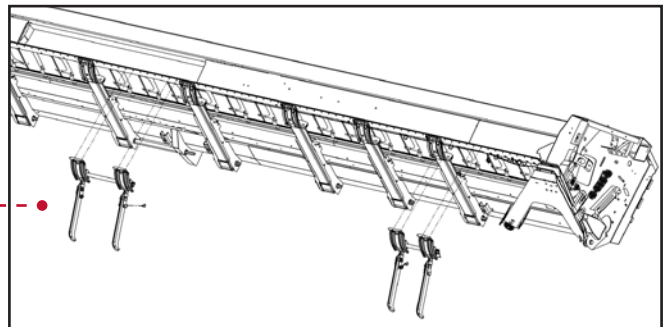
### REEL TINE FLAP KIT (3020 HEADER)

For use in short light crops to improve feeding to the auger. In short light crops the tine reel will comb through the crop without feeding. The flaps improve the feeding of the crop to the auger.



### RIGID AUTO HEADER HEIGHT CONTROL (3020 HEADER)

A kit is available that equips the header with four sensors to use the Auto Header Height Control system when cutting in rigid mode.



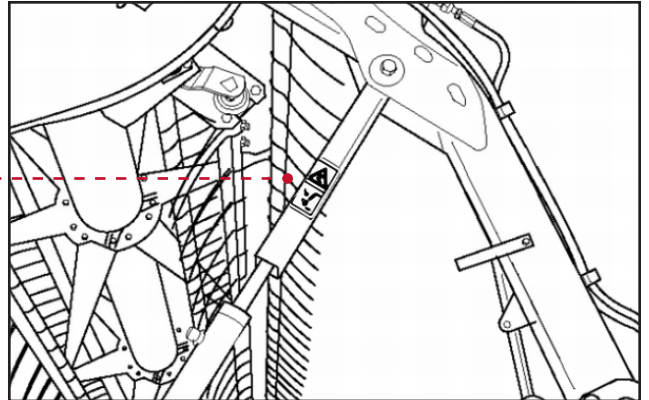
**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.



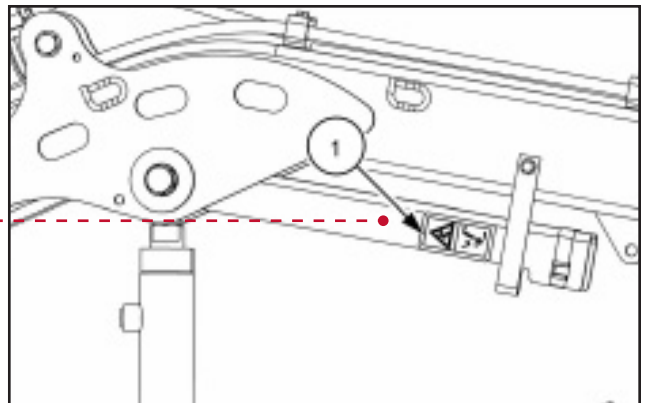
# ACCESSORIES

## REEL SAFETY LATCH (3050 HEADER)

The 3050 auger head is equipped with a reel safety latch, one located on each side, which must be turned over to upper position to prevent the reel from lowering by accident. When work or repairs are being completed underneath the reel, be sure the reel is raised up completely and the safety latches are in the ON position.

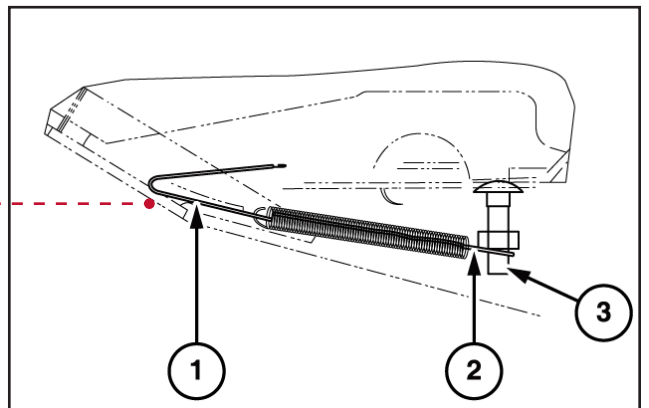


When the head is not being used, the reel safety latches should be in the position shown in the drawing to the right.



## KNIFE PROTECTION GUARDS (3050 HEADER)

When the header is trailing behind a motored vehicle, knife guards are recommended. Installation of the knife guards are as shown in the drawing to the right. Slide the knife guards over the knife and secure the spring underneath the header on the bolt.



**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

## ACCESSORIES

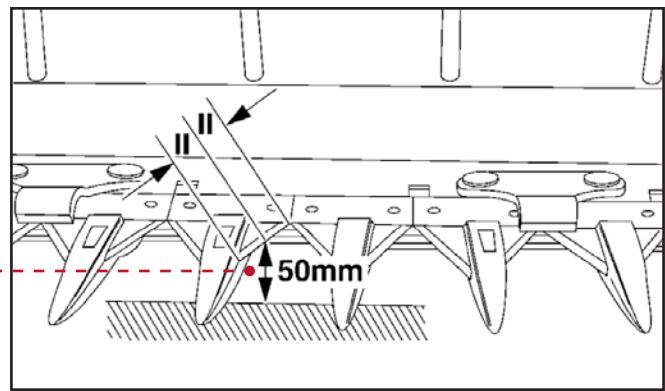
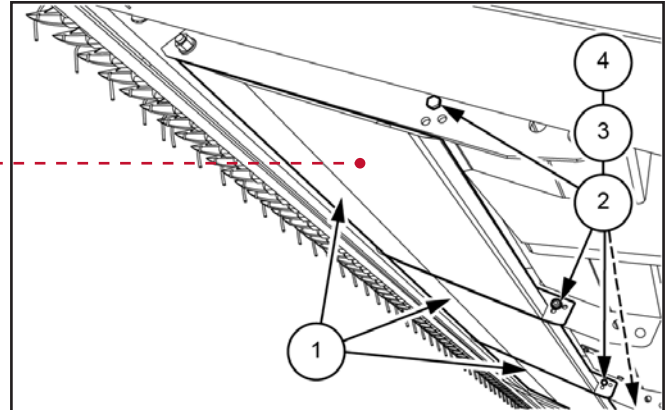
### SKID SHOES ADJUSTMENT (3050 HEADER)

The skid shoes are installed on the underside of the header. The header comes from the factory with the skid shoes positioned as shown in the drawing to the right.

The shoes can be relocated by the removal of the bolts on plate. To set the shoes in one of three different positions, do as follows:

Attach the header to the combine and then place the combine on a level hard surface and lower the header to the ground. Be sure the rear part of the shoe touches the ground first. Now check the height "X" = +/- 2in. (50mm) (this is an average value).

If the shoe requires adjustment, remove the nuts, washers and bolts and move the skid shoe to the desired position and then reinstall the nuts, washers and bolts (labeled 2, 3 and 4 in the top drawing).

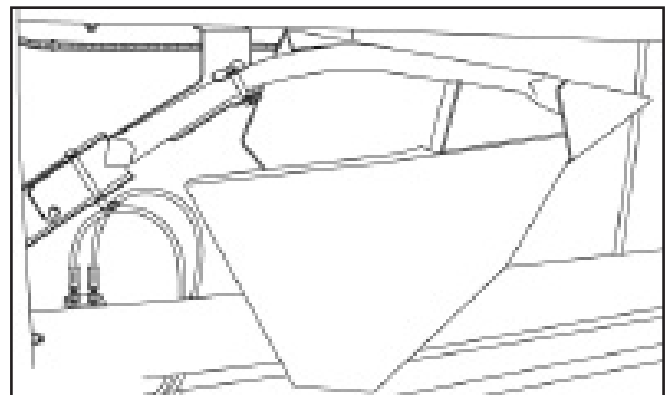
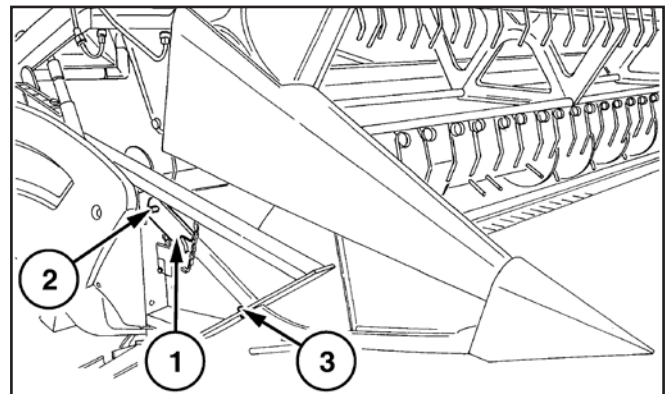


### TERRAIN-TRACKER SENSOR (3050 HEADER)

The 3050 header is equipped with a Terrain-Tracker system and to use the system open the lock on each side of the header and lower the plates.

**NOTE:** 16 to 30 foot grain headers have a set of 2 sensors and the 35 foot and 41 ft. grain headers have a set of 4 sensors.

**NOTE:** Be sure too lock the plates as shown in the drawing to the right to prevent damage to the plates.

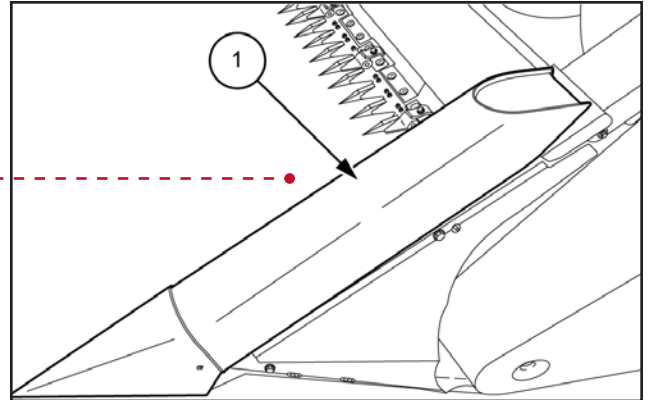


**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

# ACCESSORIES

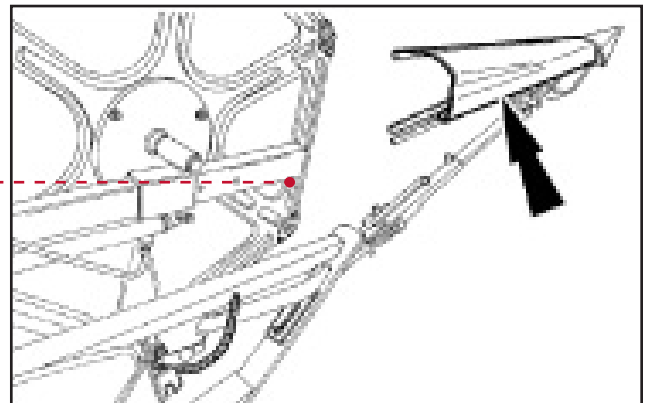
## FIXED SHORT DIVIDERS (3050 HEADER)

Fixed short dividers work very well in crops where the straw is short.



## PIVOTABLE ADJUSTABLE CROP DIVIDERS (3050 HEADER)

Pivotable adjustable dividers are very efficient in crops where the straw is long. The dividers can be installed on each side of the cutterbar. The left-hand divider is used to subdivide the field into smaller sections and should be installed on the hook (1) (either upper or lower) and then secured with the bolt (3) to avoid interference between the reel and the divider.



### Recommended adjustments

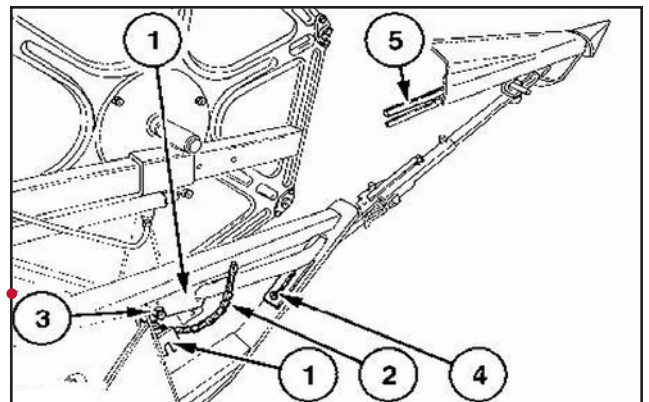
In standing up right crops, the right-hand divider should be installed on the upper hook (1) so the divider point just skims the ground. The height of the divider point is adjustable with the plate (4).

In crop laying down, the right-hand divider should be installed on the lower hook (1) so the distance from the ground to the divider point is at its highest point then and slides over the laid crop.

**NOTE:** These adjustments are essential to ensure uniform feeding to the auger.

- In a crop which is laying to the right, only the crop between the dividers will be lifted by the reel and cut. The grain which is out of reach will remain lying on the ground.
- In a crop which is laying to the left, the grain between the dividers will be cut, and the crop out of reach of the reel will remain standing and is then cut on the next round.
- The inner divider (5) functions to guide the crop towards the center of the feed auger and to prevent the straw from wrapping around the ends of the reel.

**NOTE:** There is only one possible hook position on the 41 ft. header.



**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.



## ACCESSORIES

### ADJUSTABLE KNIFE BAR (3050 HEADER)

The position of the knife bar can be viewed with the indicator on the decal on the left-hand side of the header.

- For short crops use a short (retracted) knife bar setting.
- For long crops use an extended knife bar setting.

The taller the crop, the more the knife needs to be extended so the crop will slightly come into contact with the auger when it is cut.

Crop which is down and away from the combine the setting should be the short knife setting.

Crop which is down towards the combine the setting should be the long knife setting.

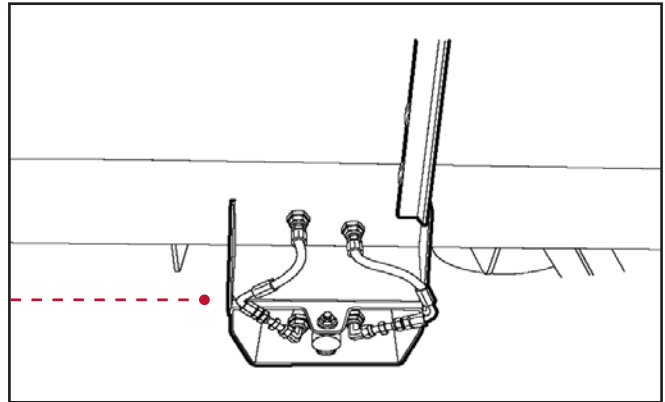
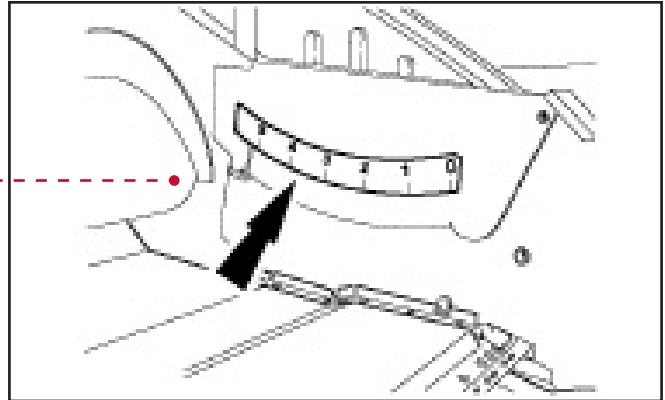
To adjust the knife bar, see the Operator's Manual of your combine.

**NOTE:** After harvest, adjust the knife bar in the fully retracted position, before you lay the grain header down onto the ground.

**NOTE:** The operator must always make sure the header knife bar is totally extended before reversing the feeder house and the header.

### Adjustable knife bar – Cylinder Bleeding

On a regular basis during the day, the knife bar should be bled. This is done by the hydraulic system moving the knife bar cylinders to allow air to purge from the system and to be sure the knife bar will always move parallel to the header.



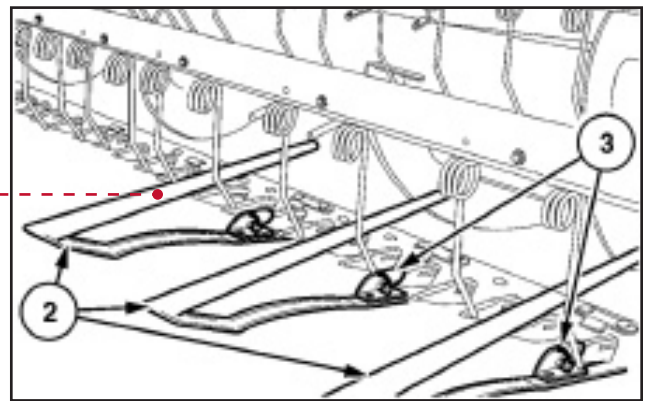
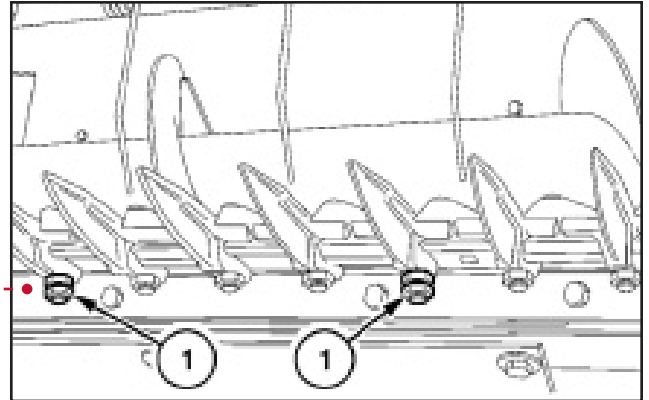
**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

# ACCESSORIES

## CROP LIFTERS (3050 HEADER)

Crop lifters are used when operating the combine in exceptional crop conditions, such as down crop or stony or rocky conditions.

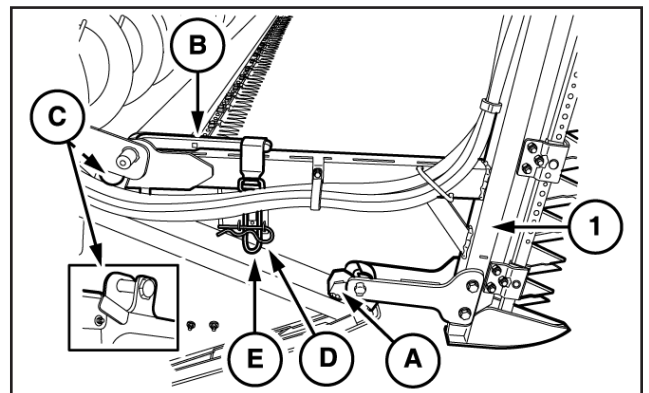
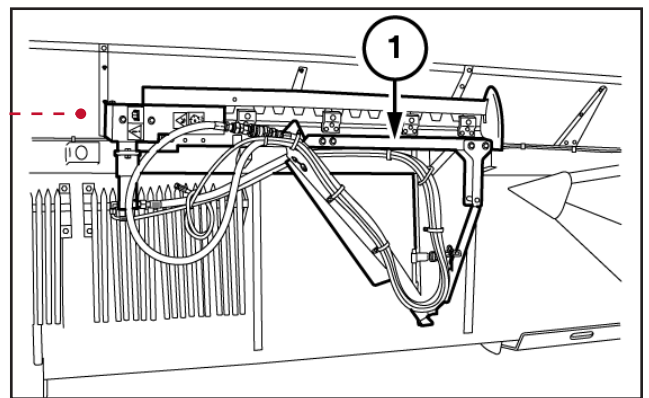
The crop lifter are installed on every fourth finger starting from the knife drive side. Replace the nut with a special double nut **(1)** (if not already installed). Then slide the crop lifter **(2)** in the slot of the nut **(1)**. Finally pull the crop lifter up and slide the pawl holder **(3)** over the knife finger top.



## HYDRAULIC VERTICAL KNIFE (3050 HEADER)

Hydraulic vertical knives are recommended when harvesting of canola seed. Both the left-hand and right-hand side knives are available.

**NOTE:** Be careful when you install the vertical knives, the mass is about **40 kg (88 lb)**. To install the kit, remove the cotter pin and the hook pin to unhook the vertical knife **(1)** from the back of the header.



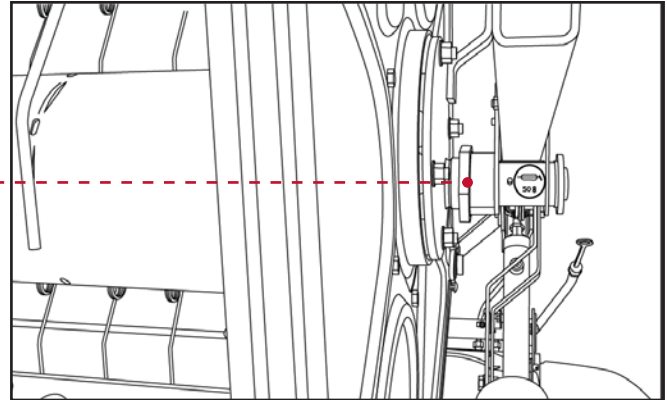
**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

## ACCESSORIES

### REEL POSITION (3050 HEADER)

#### Reel centering

This adjustment applies to the 41 ft. header where the reel has to be centered in the header beak from the factory. By doing this will make sure there is no interference with the rest of the header components. The reel is centered by an adjustment nut (1) and secured by check nuts (2) which are located on each end of the reel.



#### Reel height adjustment

The reel height is controlled hydraulically from the cab.

- In standing crop, the reel should be adjusted so the reel tine bars contact approximately the top 1/3 of the crop.
- In down crop, the reel should be lowered to pick up the crop allowing a clean cut by the knife bar.

#### Reel fore and aft setting

The reel fore and aft setting is controlled hydraulically from the cab.

- In average crop conditions, the reel should be set as close as possible to the auger flights.
- In down crop, the setting should be to move the reel forward and to incline the reel tines towards the feed auger to lift up the crop before it is cut.

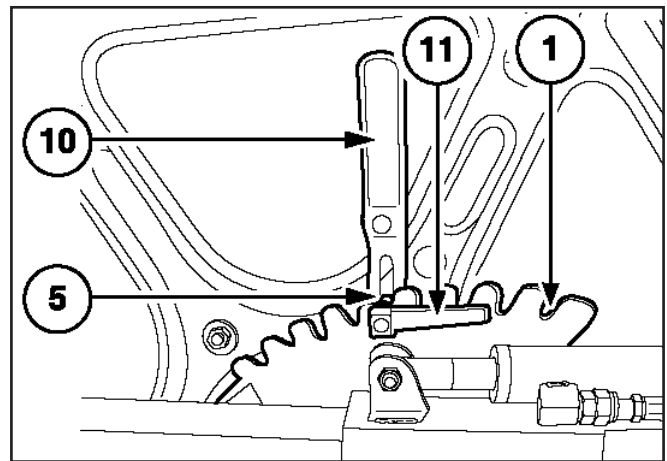
#### Reel tine pitch

To set the reel tine pitch, position the locking device (11) in one of the nine different positions. Use the handle (10).

**NOTE:** On the 35 ft. and 41 ft. header, this has to be set on both sides. On the 16 ft. to 30 ft. headers, this has to be done on the right-hand side only.

- In standing crops, the reel tines should be positioned vertically or inclined away from the feed auger.
- In down or short crops, incline the reel tines towards the feed auger. Should the positioning of the tine pitch causes material to wrap around the reel, gradually incline the tines more vertically until the reel is free of material.
- In canola seed (direct cut), rotate the reel tines upwards and position the locking device (11) at position (1) .

**NOTE:** The reel tine pitch is factory-set (for normal conditions) in position (5) .



**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

# ACCESSORIES

## AUGER (3050 HEADER)

### Feed auger

The feed auger is adjustable vertically on both sides of the header. The 41 ft. header has an additional vertical adjustment in the middle of the header. The auger trough clearance should be adjusted to produce a positive feed without the crop being threshed or bunched as it is moved to the combine feeder.

The auger height is factory-set between 0.43-0.59 in. (11-15 mm). This is done so the clearance between the auger flight and the fully retracted floor pan, has a maximum deviation on parallelism of 0.12 in. (3 mm) over the full auger length from the left-hand side and right-hand side.

When the crop is light and little material is fed to the auger, the crop can bunch under the auger and may not feed evenly to the center of the header, the auger-to-trough clearance should be reduced to gain better contact with the crop. In heavy crop or crop infested with large weeds, the auger-to-trough clearance should be increased to allow room for the material to move under the auger.

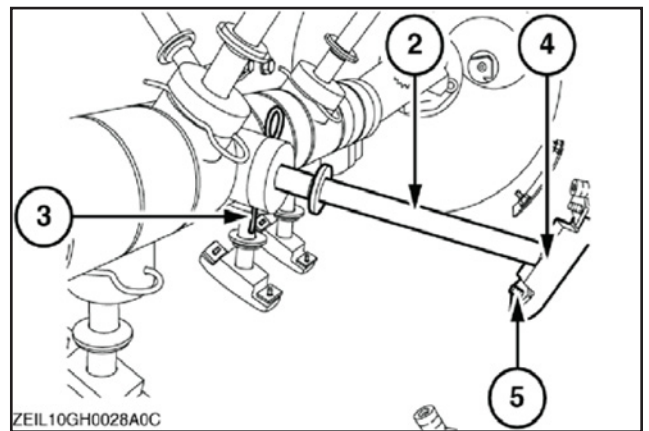
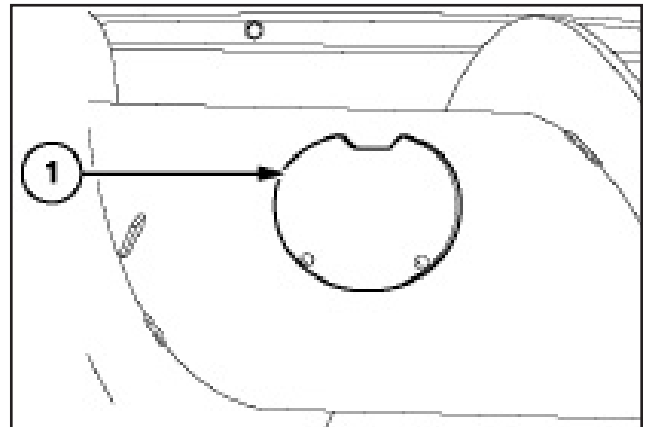
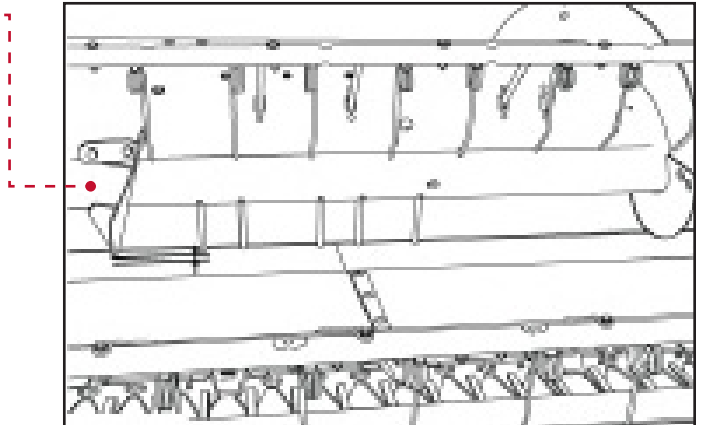
### Retractable auger fingers (16-35 ft.)

The auger is equipped with retractable auger fingers over its full length. In tall crops, the fingers have to grab the crop and pull it under the auger and the timing of the fingers is very important. The fingers can be adjusted so they move out earlier in from the auger.

If necessary, extra retractable fingers can be installed by removing the cover (1) at one side of the auger and then the cover plate on the opposite side.

Install the new retractable finger (2) with hair-pin cotter (3) and also install the extra finger guide with T-nuts. When the installation of the finger(s) is complete place the cover back (1) and tighten the bolts to a minimum torque of **89.4 lb. in. (10 N·m)**. Also check the opening between the cover and the auger is set at the maximum **1/16 in. (1.5 mm)**.

**The installation instructions applying to the 41 ft. header are different. Please see the header Operator's Manual.**



**NOTE: Always refer to the proper header and combine Operator's Manual for more instruction and information.**



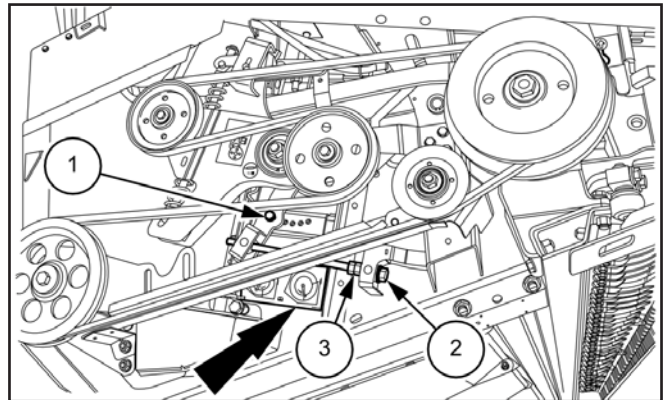
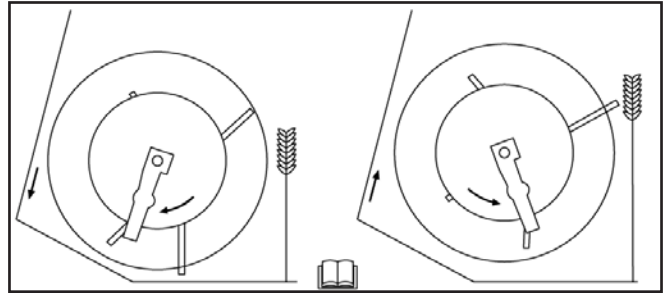
## ACCESSORIES

### FINGER TIMING (3050 HEADER)

In long stubble crops, it is highly recommended to have the timing of the retractable fingers more aggressive and the height of the auger to be raised.

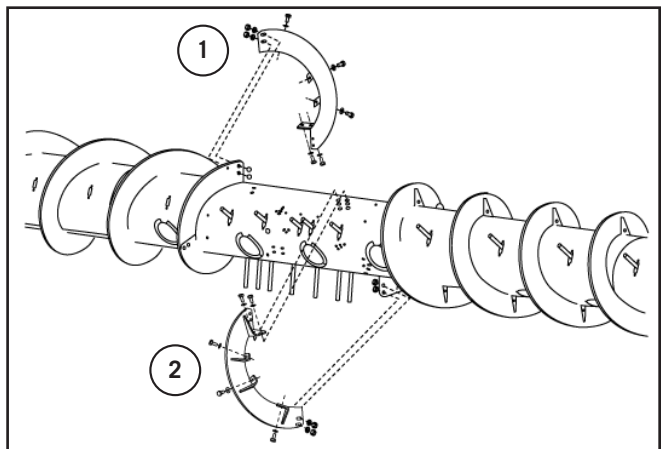
To time the fingers of a 41 ft. header figures 1 and 2 are used to complete the adjustment.

In long stubble crops, it is highly recommended to have the timing of the retractable fingers more aggressive and the height of the auger to be raised.



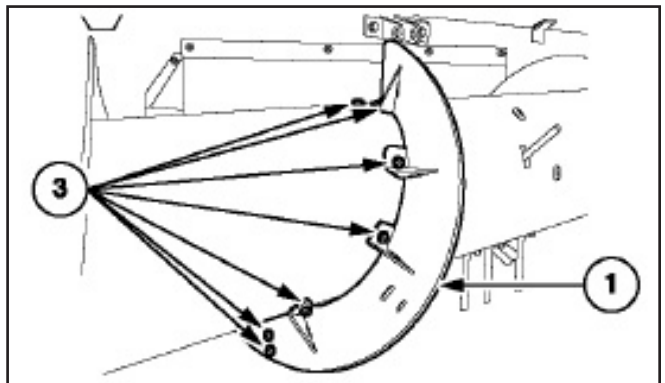
### AUGER FLIGHT EXTENSIONS (3050 HEADER)

The auger has as standard equipment two auger flight extensions (1) and (2) on both sides. To prevent the material flow from being blocked or stalled, remove the outer retractable finger on the outside of the middle section.



When the crop is fed too far to the center of the combine feeder opening, remove the auger flight extensions (1) on both sides by removing the installation bolts (3). This is an important adjustment especially in dry crop conditions.

There is a special, longer type of auger flight extension kit available should it be the crop is not feeding far enough to the center of the combine feeder opening.

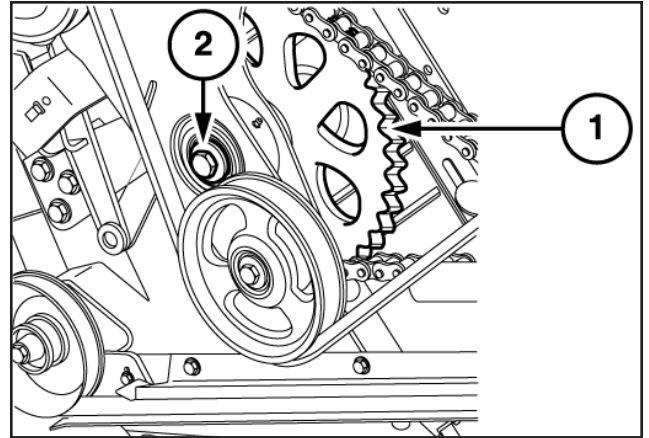


**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

# ACCESSORIES

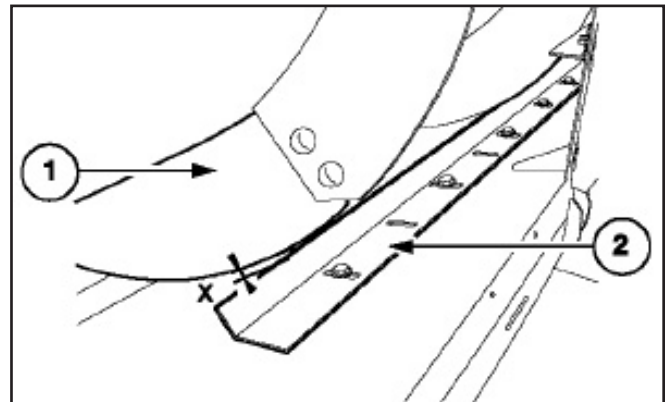
## AUGER DRIVE (3050 HEADER)

The feed auger is driven by a 38-tooth sprocket (1) which provides a speed of **166 RPM**. The 47-tooth sprocket will provide a speed of **135 RPM** and is available as an accessory should grain loss through “shattering” occur in the header. For all headers, torque the nut (2) between **183-223 lb. ft. (248-302 N·m)**.



## STRIPPER PLATE (3050 HEADER)

The plates should be adjusted to maintain a clearance between the stripper plates (2) and the auger flight (1). If the adjustment is not made, the straw could wrap around the auger. The distance “X” should be between **0.118- 0.276 in. (3-7 mm)**. Be sure the bolts are torqued between **13-17 lb. ft. (18-23 N·m)**.



Having too wide of a clearance between the auger and the stripper plates can lead to poor feeding and the crop wrapping around the auger. Bottom stripper plate (1). Back stripper plate (2).

**NOTE:** Be sure the auger is adjusted parallel to the header floor pan.



**NOTE:** Always refer to the proper header and combine Operator’s Manual for more instruction and information.

## ACCESSORIES

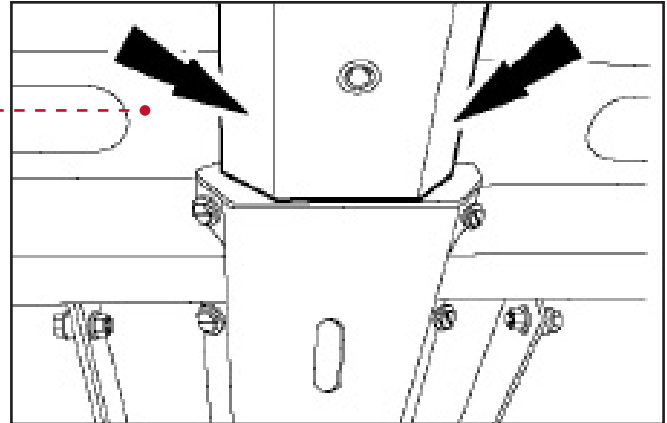
### HEADER BLOCKAGE (3050 HEADER)

#### Manually clearing and cleaning

When the header has a blockage, or dirt has entered the header, use the header reverser system on the combine to unblock the header.

If the header reverser system does not clear the blockage and/or remove the dirt, clear the header manually.

Always refer the proper operators manual for the instructions.



**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.

# MACHINE SETTINGS

3050 auger head settings for different crop types.

Crop Type	Optional Equipment Required	Crop Dividers	Auger Adjustment	Reel
Wheat	Not Applicable	Pivotable adjustable crop dividers or short dividers	Auger: <b>1/2 in. (12 mm)</b> Fingers: <b>3/8 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Slightly faster than ground speed</li> <li>Set reel as close as possible to the feed auger</li> <li>Tines vertical</li> </ul>
Barley	Not Applicable	Pivotable adjustable crop dividers	Auger: <b>1/2 in. (12 mm)</b> Fingers: <b>3/8 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Slightly faster than ground speed</li> <li>Set reel as close as possible to the feed auger</li> <li>Tines vertical</li> </ul>
Winter Barley	Not Applicable	Pivotable adjustable crop dividers	Auger: <b>1/2 in. (12 mm)</b> Fingers: <b>3/8 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Slightly faster than ground speed</li> <li>Set reel as close as possible to the feed auger</li> <li>Tines vertical</li> </ul>
Rye	Not Applicable	Pivotable adjustable crop dividers	Auger: <b>1/2 in. (12 mm)</b> Fingers: <b>3/8 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Slightly faster than ground speed</li> <li>Set reel as close as possible to the feed auger</li> <li>Tines vertical</li> </ul>
Oats	Not Applicable	Pivotable adjustable crop dividers	Auger: <b>1/2 in. (12 mm)</b> Fingers: <b>3/8 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Slightly faster than ground speed</li> <li>Set reel as close as possible to the feed auger</li> <li>Tines vertical</li> </ul>
Triticale	Not Applicable	Pivotable adjustable crop dividers	Auger: <b>1/2 in. (12 mm)</b> Fingers: <b>3/8 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Slightly faster than ground speed</li> <li>Set reel as close as possible to the feed auger</li> <li>Tines vertical</li> </ul>
Rice	Rice Knife	Short crop dividers	Auger and finders as close as possible to the header trough, install optional 47-tooth sprocket	<ul style="list-style-type: none"> <li>Slightly faster than ground speed</li> <li>Set reel as close as possible to the feed auger</li> <li>Tines vertical</li> </ul>
Canola	Vertical Knife	Short crop dividers	Auger: <b>1-1/2 in. (40 mm)</b> Fingers: <b>3-45/64 in. (94 mm)</b>	<ul style="list-style-type: none"> <li>Slower than ground speed</li> </ul>
Grass Seed	Not Applicable	Pivotable adjustable crop dividers	Auger: <b>1/2 in. (12 mm)</b> Fingers: <b>3/8 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Speed according to crop conditions</li> </ul>
Beans/Peas	Crop Lifters	Pivotable adjustable crop dividers	Auger: <b>1/2 in. (12 mm)</b> Fingers: <b>3/8 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Speed according to crop conditions</li> </ul>
Sorghum	Sorghum Fingers*	Pivotable adjustable crop dividers	Auger: <b>3/4 in. (20 mm)</b> Fingers: <b>19/32 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Speed equal to ground speed</li> <li>Install cover plates on reel tines*</li> </ul>
Safflower	Not Applicable	Pivotable adjustable crop dividers	Auger: <b>3/4 in. (20 mm)</b> Fingers: <b>19/32 in. (10 mm)</b>	<ul style="list-style-type: none"> <li>Speed a little faster than ground speed</li> </ul>
Soy Beans	The use of a Flex Header is recommended	Pivotable adjustable crop dividers	Auger: <b>3/4 in. (20 mm)</b> Fingers: <b>19/32 in. (10 mm)</b> Use 47-tooth sprocket	<ul style="list-style-type: none"> <li>Speed equal to ground speed</li> <li>Install cover plates on reel tines*</li> </ul>
Sunflower	Dished plates on header front*	Fixed crop dividers	Auger: <b>3/4 in. (20 mm)</b> Fingers: <b>19/32 in. (10 mm)</b> Use 47-tooth sprocket	<ul style="list-style-type: none"> <li>Remove each second tine bar</li> <li>Install cover plates on remaining bars and tines*</li> </ul>

\* Purchase from your local Case IH dealer.

**NOTE:** Always refer to the proper header and combine Operator's Manual for more instruction and information.









**SAFETY NEVER HURTS!™** Always read the Operator's Manual before operating any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs, and use any safety features provided. CNH America LLC reserves the right to make improvements in design and changes in specifications at any time without notice and without incurring any obligation to install them on units previously sold. Specifications, descriptions and illustrative material herein are as accurate as known at time of publication, but are subject to change without notice. Availability of some models and equipment builds varies according to the country in which the equipment is used.