

REDEKOP™

MAV CHOPPER

JD X9

OPERATOR'S MANUAL

PRODUCT NUMBER: 340-115W

CD1697-01_R0



MAV Chopper

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Table of Contents

	<u>Section</u>
0 Safety	
Safety Instructions	0.1
Safety Decals	0.20
Information Decals	0.21
Serial Number	0.22
1 General Information	
General Information of Components	1.1
2 Operation	
Start of Threshing	2.1
Corn and Sunflowers	2.2
Actuator Controls	2.3
Combine and Chopper Functions	2.4
Stationary Knifebar	2.5
Tailboard Fin Adjustment	2.6
Wide Spread Fin Assembly	2.7
Combine Grain Loss Checking	2.8
Windrow Operation	2.9
Drive Shields	2.10
Combine Sieve Accessibility	2.11
3 Maintenance	
Preventative Maintenance Schedule	3.1
Preventative Maintenance - Mechanical Systems	3.2
Straw Chopper Rotor Blades Wear	3.2.1
Straw Chopper Rotor Blade Replacement	3.2.2
Straw Chopper Rotor Fan Blade Replacement	3.2.3
Stationary Knife Blades	3.2.4
Drive Belt	3.2.5
Bearing	3.2.6
Cosmetic	3.2.7
Cleanout	3.2.8
Tailboard	3.2.9
Miscellaneous	3.2.10
4 Chopper Functions on Monitor	
Redekop MAV Chopper	4.1
5 Troubleshoot	5
6 FAQ	6
7 Warranty	7
8 Standard Replacement Parts	8

Read and Understand This Manual Before Operating This Machine

- Learn how to operate and service the machine correctly. Failure to do so could result in personal injury or equipment damage. Redekop will not accept any responsibility for any damage or malfunctions resulting from failure to comply with the operator's manual.
- This manual provides descriptions of as well as operating and maintenance instructions. This may include accessories or optional equipment not included on your machine. This is to be kept in mind when reading this manual.
- If you do not understand the information in this manual, or if you have questions, contact Redekop Customer Service.
- This manual should be considered a permanent part of your machine and should remain with the machine when you sell it.
- Right-Hand and Left-Hand sides are determined by facing the direction of travel
- Redekop reserves the right to alter illustrations and technical data contained in this manual.
- The contents of this manual are intellectual property of Redekop. All use and/or reproduction not specifically authorized by Redekop is prohibited.
- All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. Redekop reserves the right to make changes at any time without notice.
- This manual should be considered a permanent part of your MAV Straw Chopper and should remain with the machine when you sell it.



ATTENTION!
Low Battery or alternator voltage can cause system errors

0 Safety

0.1 Instructions

0.1.1 IMPORTANT: Read through this instruction manual thoroughly and familiarize yourself with the MAV Straw Chopper before operating these components.

This instruction manual explains the proper procedure for operating the Redekop MAV Straw Chopper.



0.2 Recognize Safety Information

0.2.1 This is a safety-alert symbol. When you see this symbol on your straw chopper or in this manual, be alert to the potential for personal injury.



Follow recommended precautions and safe operating practices.

0.3 Understand Signal Words

0.3.1 A signal word - DANGER, WARNING, or CAUTION - is used with the safety-alert symbol. DANGER identifies the most serious hazards.

WARNING or CAUTION safety signs are located near specific hazards or precautionary areas in this manual.



0.4 Follow Safety Instructions

0.4.1 Carefully read all safety messages in this manual and on your machine. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new MAV Straw Chopper components and repair parts include the current safety signs. Replacement safety signs are available from your dealer.



There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

Learn how to operate the MAV Straw Chopper and how to use controls properly. Do not let anyone operate without instruction.

Keep your MAV Straw Chopper in proper working condition. Unauthorized modifications to the Straw Chopper may impair the function and/or safety and affect the Straw Chopper's life.

If you do not understand any part of this manual and need assistance, contact your dealer.

0.5 Safe Operating Practices

0.5.1 DO NOT stand near the MAV Straw Chopper when combine is running.

ALWAYS refer to your Combine Operator's Manual, and review the Safety section before operating machine. The Combine Operator's Manual details safe operating practices that must be followed to protect you and others from accidental injury and/or death.

Operate MAV Straw Chopper only when all guards are correctly installed.

Before moving away, always check immediate vicinity of MAV Straw Chopper (e.g. for children). Ensure adequate visibility. Use a horn as a warning immediately before moving away.

When making turns, always take into consideration the width of the attachment and the fact that the rear end of the machine swings out. Attachments and ground conditions affect the driving characteristics.

Never leave combine unattended as long as engine is running.



0.6 Work In Ventilated Area

0.6.1 Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open the doors and get outside air into the area.

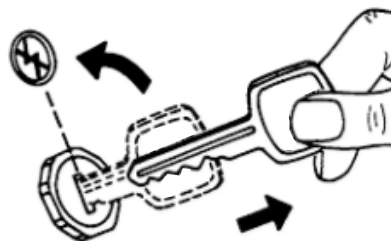


0.7 Remove Key from Ignition

0.7.1 ALWAYS shut off combine engine prior to working on it.

Apply park brake, remove key and lock operators cab.

If the combine is equipped with an additional safety master power switch, turn this to the Power OFF position.



0.8 Block Wheels

0.8.1 Park the combine on level ground.

Always engage the park brake and block the combine wheels prior to working to prevent the combine from moving.



0.9 Practice Safe Maintenance

0.9.1 Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust MAV Straw Chopper while it is moving. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Keep hands, feet and clothing away from power-driven parts. Tie long hair behind your head. Do not wear rings, jewelry, a necklace, a necktie, scarf, or loose clothing when you work near machine or moving parts. If these items were to get caught, severe injury could result.

Securely support any MAV Straw Chopper elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on MAV Straw Chopper.



0.10 Guards and Shields

0.10.1 Keep guards and shields in place at all times. Ensure that they are serviceable and maintained correctly.



0.11 Avoid Contact With Moving Parts

0.11.1 Keep hands, feet and clothing away from power driven parts. Never clean, lubricate or adjust machine when it is running.

Never attempt to clear obstructions from machine unless it is disengaged, engine shut off and key removed.



0.12 Avoid High-Pressure Fluids

0.12.1 Inspect hydraulic hoses periodically - at least once per year - for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

Replace worn or damaged hose assemblies immediately.

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.



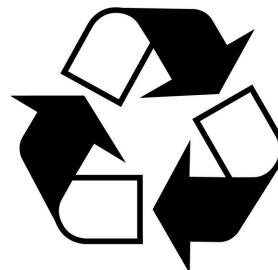
0.13 Dispose of Waste Properly

0.13.1 Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste includes such items as oil, fuel, coolant, brake fluid, filters and batteries.

Use appropriate tools and personal protective equipment such as clothing, gloves, face shields or glasses, during the removal or handling of objects and materials.

Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

Do not pour waste onto the ground, down a drain, or into any water source.



0.14 Use Proper Lifting Equipment

0.14.1 Lifting heavy components incorrectly can cause severe injury or MAV Straw Chopper damage.

Follow recommended procedure for removal and installation of components in the manual.

Ensure lifting equipment is rated for the job

Ensure operator is appropriately licensed to operate lifting equipment



0.15 Personal Protective Equipment (PPE)

0.15.1 A Qualified Person designated by the employer, who is knowledgeable about and familiar with all relevant specifications and assembly instructions and is capable of identifying existing or potential hazards in surroundings or working conditions which may be hazardous or dangerous to employees shall determine appropriate Personal Protective Equipment required for this assembly.

Personal Protective Equipment (PPE) are devices worn by the employees to protect against hazards in the environment. Examples include safety glasses, face shields, respirators, gloves, hard hats, steel-toe shoes, and hearing protection. Wear close fitting clothing and safety equipment appropriate for the job.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

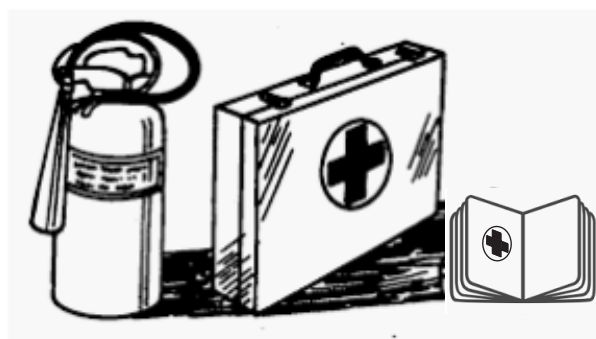


0.16 Prepare for Emergencies

0.16.1 Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital and fire department near your telephone.



0.17 Fire Extinguisher

0.17.1 A 6 kg (15 lb) general-purpose fire extinguisher meeting national certification requirements must be installed on left side of operator's platform.

Maintain fire extinguisher to keep it in operating condition.

Make sure that the fire extinguisher is always ready for use. Refer to the fire extinguisher's manual for instructions on how to operate it. Once extinguisher is operated - no matter how long - it must be recharged.

Keep the engine clean and free of dust, chaff and straw to prevent the possibility of fire.



0.18 Remove Accumulated Crop Debris

0.18.1 The build up of chaff and crop debris in the engine compartment, on the engine, near bearings and moving parts is a fire hazard. Check and clean these areas frequently.



0.19 In the Event of Fire

0.19.1 Stop work immediately at first sign of fire. This may be the smell of smoke or the sight of smoke or flames. Get off the machine immediately and move away from the fire. Do not return to the machine or fire!



CAUTION: Avoid personal injury.
If a fire is too far advanced, do not try to extinguish it.
Call the fire department!
The number one priority is safety. Always put the safety of the operator and bystanders first.

If a fire can be safely extinguished, proceed carefully and follow these guidelines:

1. Remove fire extinguisher from bracket and carry it to the area of fire.
2. Approach area of fire with your back to the wind.
3. Pull the safety pin out of actuating lever.
4. Hold extinguisher upright, pointing nozzle away from you and aim hose at base of the flames.
5. Squeeze the lever slowly and evenly to discharge fire extinguisher.
6. Move extinguisher nozzle side to side to cover the source of the fire evenly with extinguishing agent.



0.20 Safety Decals

Pictorial Safety Signs

At several important places on this machine, safety signs are affixed intending to signify potential danger. The hazard is identified by a pictorial in a warning triangle. An adjacent pictorial provides information on how to avoid personal injury. These safety signs and a brief explanatory text follow.

Hand Injury / Rotate Danger RP1089

Risk of injury caused by rotating parts.



Projectile Hazard / Stand Clear RP872

Stay clear of these components when the engine is running.



Caution / Check Service Manual RP873

This operator's manual contains all important information necessary for safe machine operation. Carefully observe all safety rules to avoid accidents.



Keep Hands out of Belt Area / Rotate Danger
RP874

Do not touch any moving parts. Wait until all moving parts have stopped.



Kickback Hazard / Stand Clear
RP1086

Avoid personal injury. Kickback hazard when removing access panel.



Caution / Hearing Protection Required
RP1090

Use hearing protection whenever operating the machine



0.21 Information Decals

Redekop MAV Straw Chopper Serial Number Plate

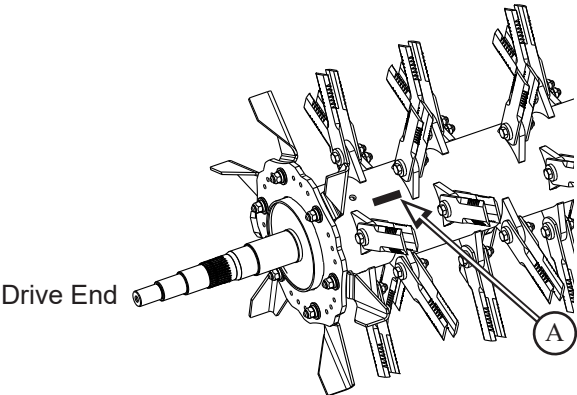


Grease Every 50 Hours
RP1092

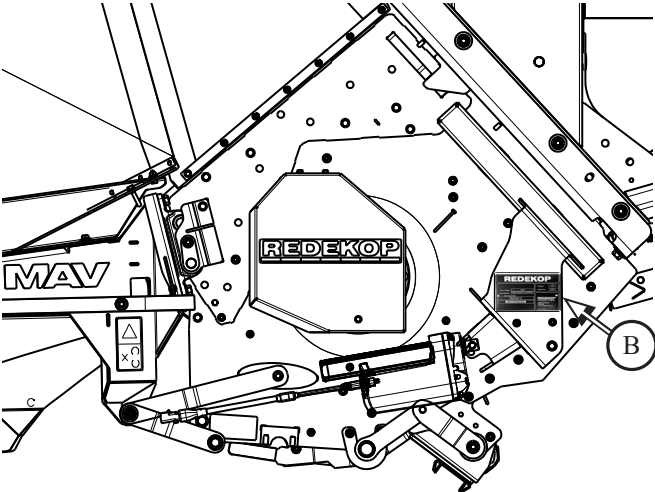


0.22 Serial Number

0.22.1 The rotor serial number (A)
- stamped and located on the rotor tube, on the drive end



0.22.2 Redekop MAV Chopper serial number (B):
- located on the chopper sidewall, non-drive side



1 General Information

1.1 General Information of Components

The MAV Straw Chopper system will consist of the following components:

Rotor (A)

Rotates chopper blades at high speed to process straw

Chopper Blades (B)

Cuts the straw into small manageable pieces

Fan Blade Shroud (C)

Envelopes the fan blades either end of rotor to create air velocity

Fan Blades (D)

Generates high-velocity airflow to achieve a wide and consistent straw spread

Knife Bar Assembly (E) (also known as stationary knife or counter knife)

Slides in and out enabling cutting of variable sizes of straw or to conserve power

Knife Bar Blades (F)

Cuts the straw

Tailboard (G)

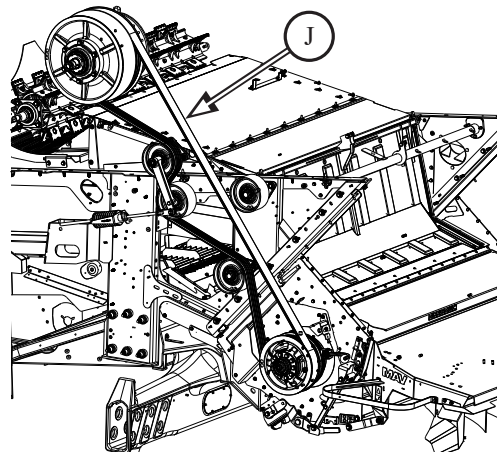
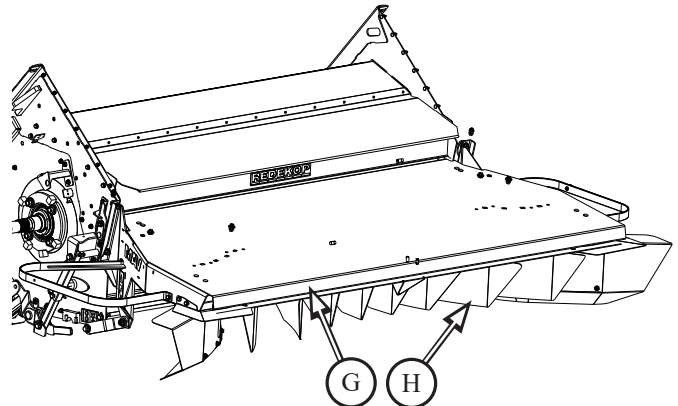
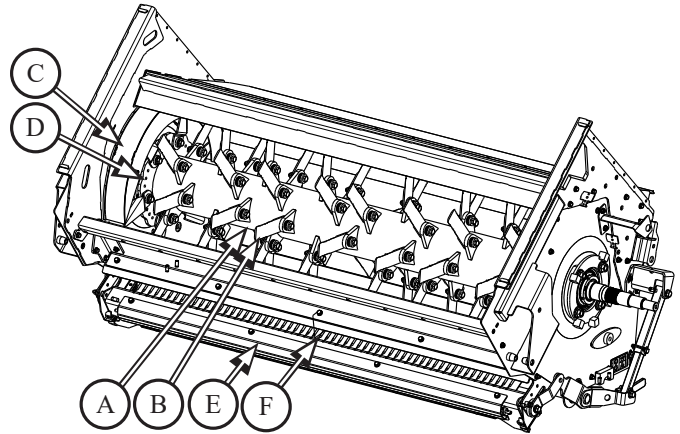
Facilitates spread-width control of the chopped straw through height adjustment and ensuring a uniform spread

Tailboard Fins (H)

Adjustable fins for fine tuning straw direction and distribution

Drive Belt (J)

Main chopper drive belt



2 Operation

2.1 Start of Threshing



Start threshing module in low speed and listen for clearance problems.
If a knocking noise is heard, stop machine immediately!
Fix problem and repeat procedure.
Progress to full power when everything is running smoothly at lower speeds.

2.1.1 Ensure all personal are clear from rear of machine prior to starting

2.2 Corn and Sunflowers



CORN! SUNFLOWERS!

CAUTION:
When harvesting corn or sunflowers,
the knifebar blades **MUST BE ALL THE WAY OUT** of the chopper housing
and **ROTOR MUST BE RUN ON SLOW SPEED (800-1200 rpm)**

2.2.1 Follow all other settings as found in the combine operators manual

2.3 Actuator Controls

2.3.1 All chopper and tailboard actuator controls will operate through OEM screen

2.4 Combine and Chopper Functions

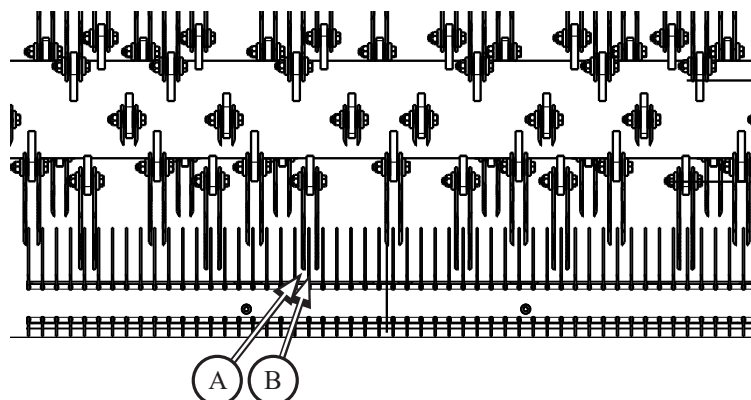
2.4.1 All combine and chopper functions will operate through OEM screen

2.4.2 The following operations apply to the MAV Straw Chopper

2.5 Stationary Knifebar

2.5.1 Check the clearance between the rotor blades (A) and stationary blades (B) to ensure there is adequate space to operate without obstruction:

- There should be no less than 4mm (5/32in) of clearance between each blade edge and the closest stationary blade



- Check for clearance of the rotor blades with the stationary knifebar blades by rotating rotor blades through the stationary blades
- Clearance problems may occur when rotor blades and/or stationary knifebar blades have deformed by hard objects which pass through the combine - check and replace components as necessary. Follow blade replacement procedure if changing rotor blades to ensure rotor maintains in balance
- Repetitive ticking or knocking sounds emitted from the straw chopper may signal a minor clearance problem - the straw chopper should be stopped immediately and examined

2.5.2 Stationary Knifebar Blade Adjustment

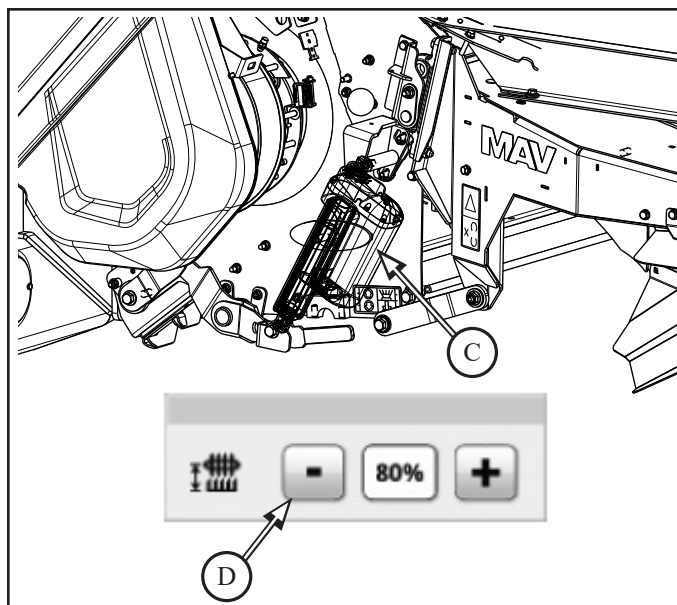
2.5.2.1 The position of the knifebar blade inside the straw chopper housing will determine the cut straw length and horsepower used:

- fully out of the straw chopper housing creates the longest cut length and lowest power requirement and fuel consumption
- fully into the straw chopper housing creates the finest cut length, higher power requirement and fuel consumption



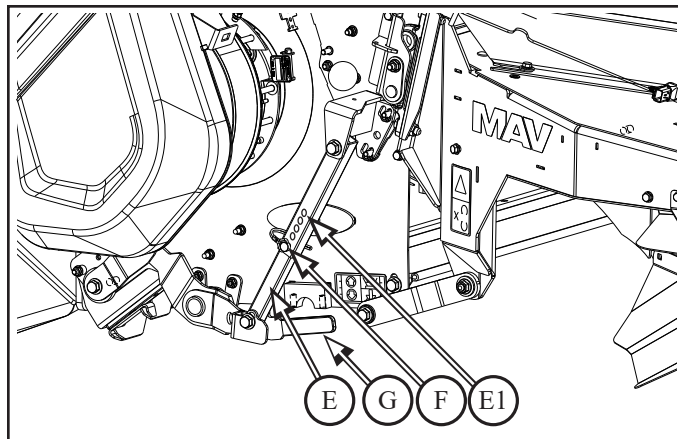
**Start with the knives completely out or only partially inserted.
Adjust depth of knifebar blades to suit the desired cut.
Achieving the finest straw cut will require more horsepower.**

2.5.2.2 To adjust depth of the knifebar blades on a machine with actuated (C) control option, use OEM controls (D) on screen



2.5.2.3 To adjust depth of the knifebar blades on a machine with manual (E) control:

- remove pin (F) from telescoping bracket (E) hole (E1)
- pivot handle (G) up or down to move knifebar blades in or out of straw chopper housing
- insert pin (F) into desired hole (E1) to suit the cut length
 - bottom hole sets the knifebar blades fully out if an extra fine cut is not required
 - top hole sets the knifebar blades fully in to get the finest cut possible
 - each hole (E1) incrementally sets the knifebar blades by 25% in or out



CORN! SUNFLOWERS!

CAUTION:

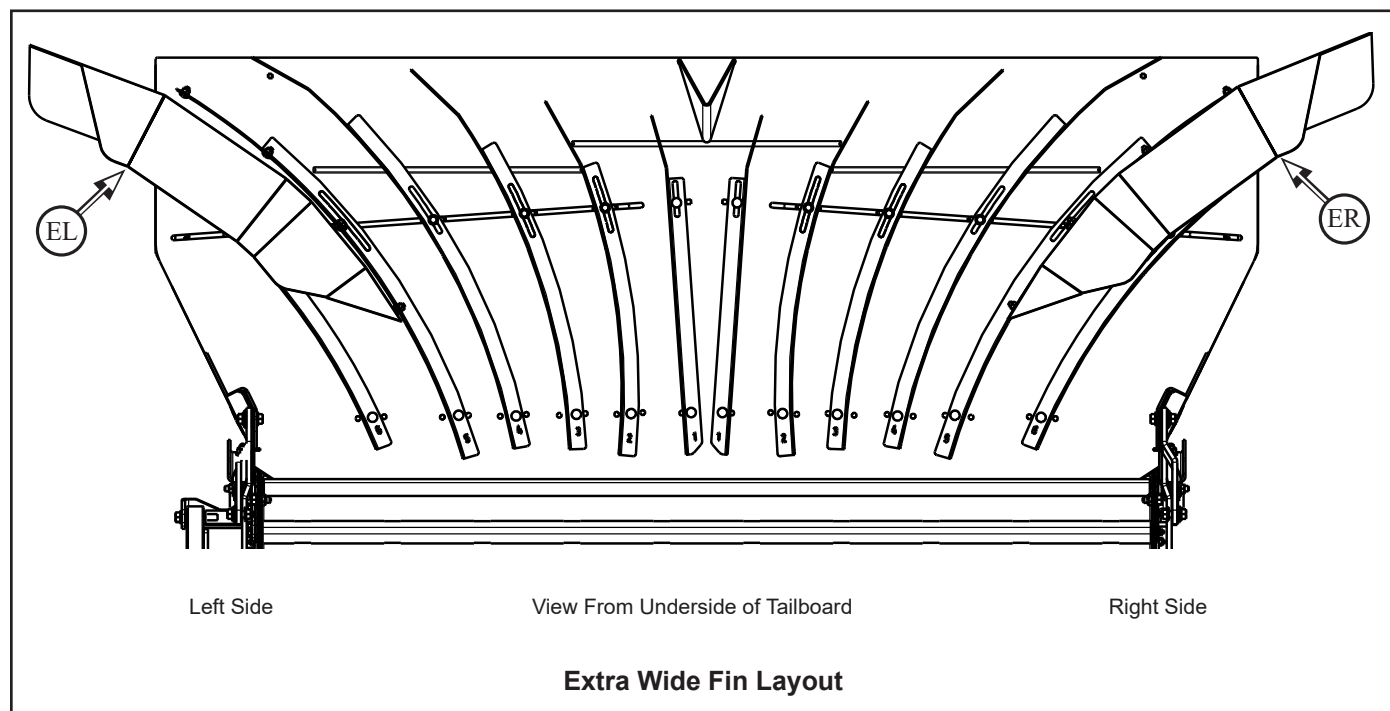
When harvesting corn or sunflowers,
the knifebar blades **MUST BE ALL THE WAY OUT** of the chopper housing
and ROTOR **MUST BE RUN ON SLOW SPEED** (800-1200 rpm)

2.6 Tailboard Fin Adjustment

2.6.1 Extra Wide Spread Fins

The tailboard fins are set for extra wide spread width of 15m (50ft)

- fin positions are adjusted directly with actuators, through the OEM controls
- fins positions can be adjusted between 10% and 100% to achieve your target spread width
- use the OEM controls to offset fin angles for wind compensation as required

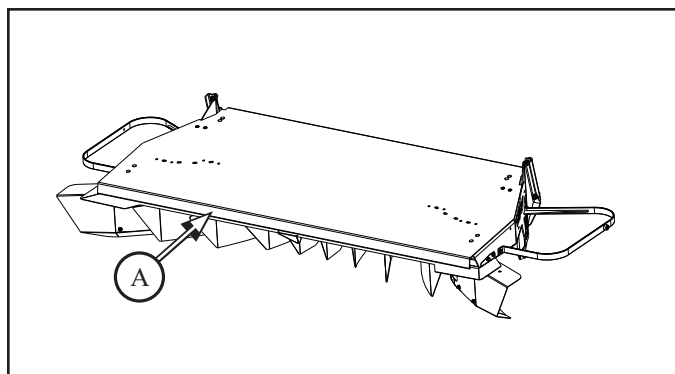


2.6.2 Access into Tailboard for Fin Mounts

Non-Windrow Door

2.6.2.1 Lift tailboard cover panel (A) up

- gas shocks will keep cover panel up



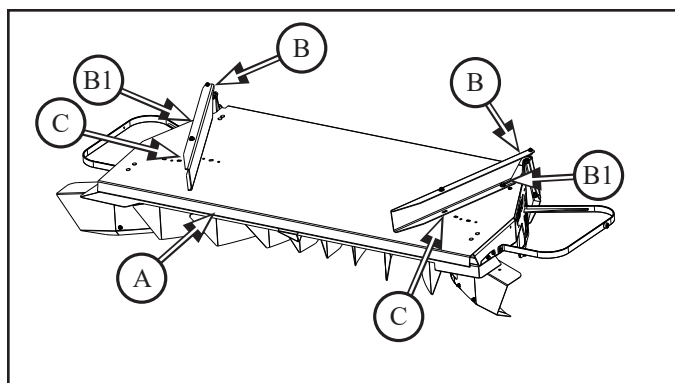
Windrow Door - if option is installed

2.6.2.2 Remove windrow curtain extensions (B):

- unlatch quarter turn fastener (C)
- slide windrow curtain extension (B) out from mount hardware (B1)

2.6.2.1 Lift tailboard cover panel (A) up

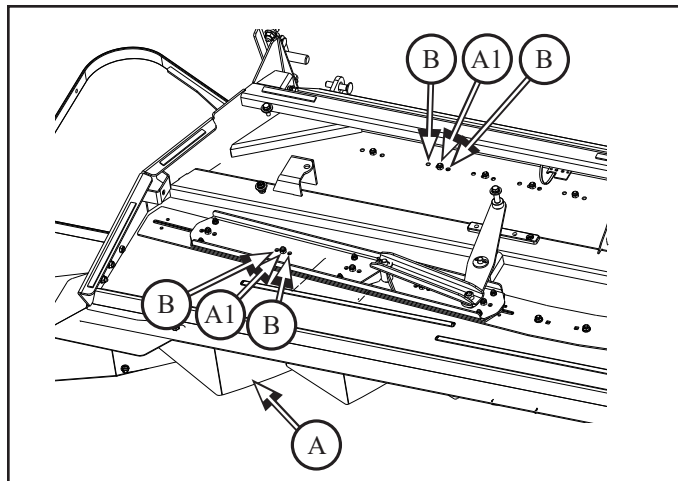
- gas shocks will keep cover panel up



2.6.2 Fine Tuning Fin Positions

The distribution of the chopped straw can be fine tuned by moving the front and rear fin (**A**) mounts (**A1**) to any of the three available holes (**B**)

- this will be a trial and error method to find the setting that works best for your specific situation
- recommended settings are to start in center hole



2.7 Wide Spread Fin Assembly

If the header/cutting width is under 15m (50ft), the included wide spread fin kit can be used to adapt the extra wide fins. This is optional if you require a spread width of 12m (40ft) or less

Not required to reduce spread width, lowering spread % on screen should be the first step

The following procedure can be completed while the extra wide spread fin assemblies (**EL & ER**) are attached to the tailboard or detached

Parts List:

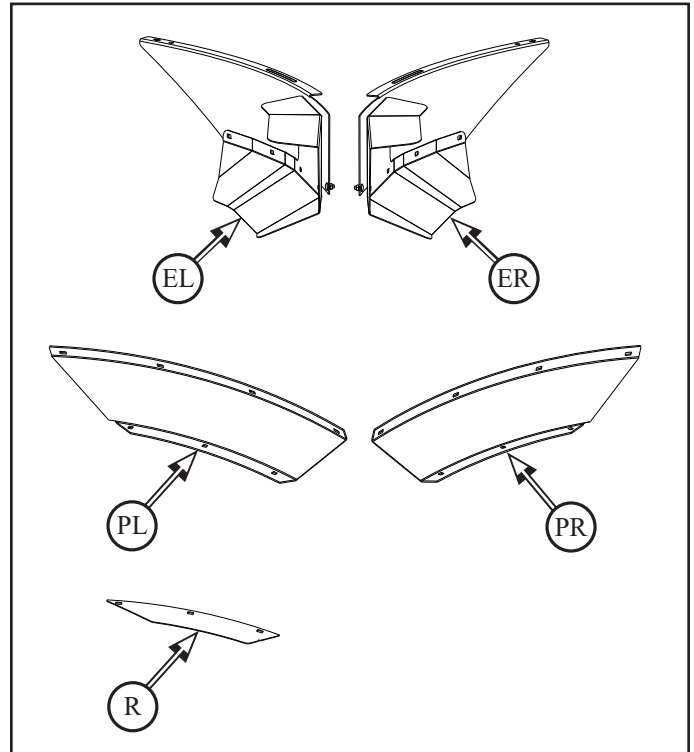
From Tailboard:

Fin Extra Wide Spread Lt (EL)	Qty 1
Fin Extra Wide Spread Rt (ER)	Qty 1

From CD1532GS Box:

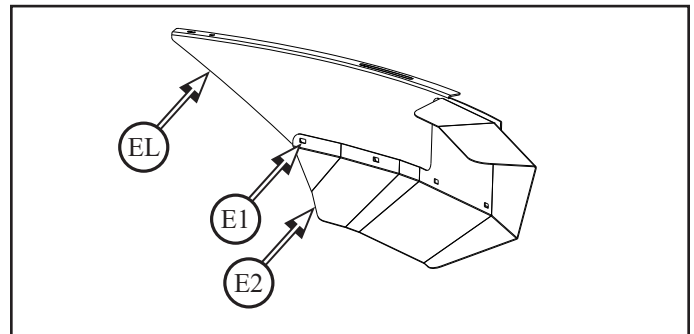
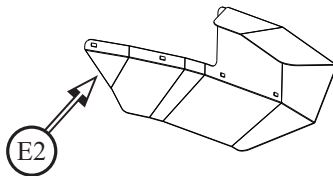
CG238GL Fin Curve Base WS Lt (PL)	Qty 1
CG238GR Fin Curve Base WS Lt (PR)	Qty 1
CG239G Fin Deflector (R)	Qty 2

CD1533S Hardware Bag



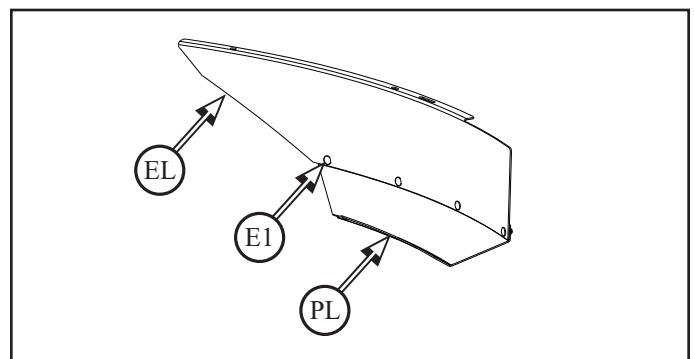
2.7.1 Remove extra wide scooped fin (**E2**) from left extra wide spread fin assembly (**EL**)

- mounting hardware (**E1**) x4 to be reused
- repeat for right fin



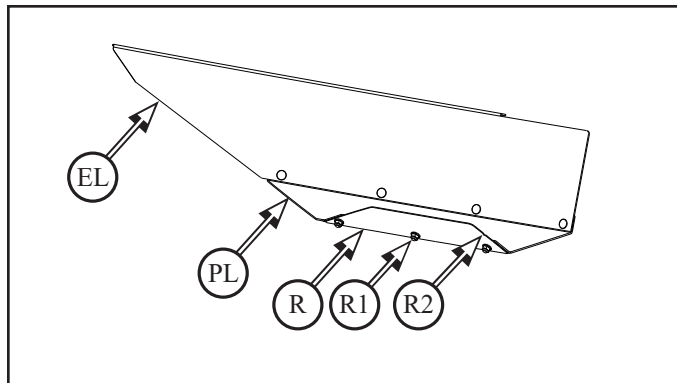
2.7.2 Install curved base fin (**PL**) to backside of left curved fin (**EL**), with:

- reuse mounting hardware (**E1**)



2.7.3 Install deflector fin (**R**) to backside of curved base fin (**PL**), with:

- M8 x 16 round head bolt and flange nut (**R1**) x3
- head of bolt on inside of fin
- ensure notch (**R2**) on deflector fin (**R**) is on the rear side



2.7.4 Repeat for right extra wide scooped fin assembly (**ER**)

2.7.5 Install new wide spread fin assemblies onto tailboard as per instructions above if not already installed

2.8 Combine Grain Loss Checking

Follow OEM procedure for grain loss testing

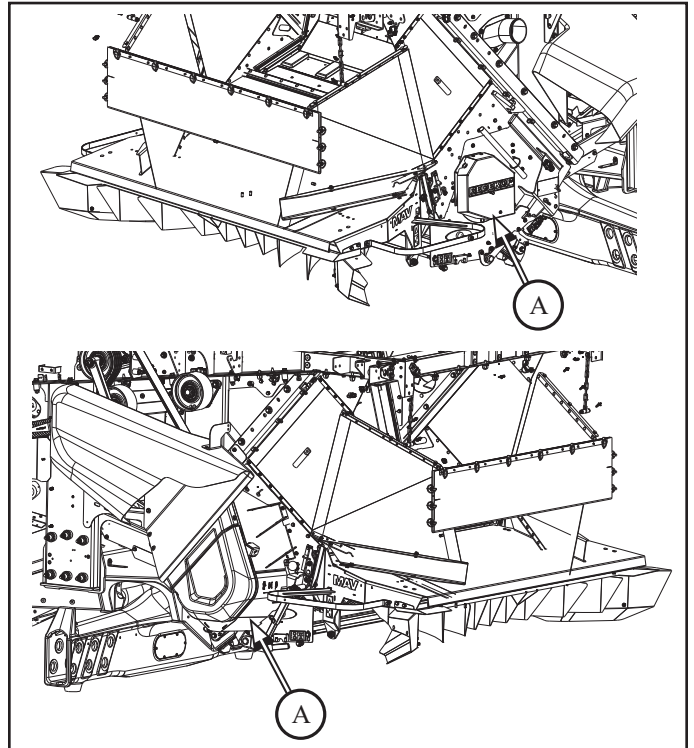
2.9 Windrow Operation

Follow OEM procedure for windrow operation. Will be dependant on residue package of machine.

2.10 Drive Shields



Do Not operate with Drive Shields (A) removed



2.11 Combine Sieve Accessibility

Combine sieve accessibility remains the same as OEM procedure - refer to combine operator's manual for complete details

- 1 - Slide chopper back/up
- 2 - Remove and replace combine sieves through opening in front of chopper



3 Maintenance

3.1 Preventative Maintenance Schedule

Although little active maintenance is required to keep your MAV Straw Chopper system operating smoothly, it is very important that the following preventative maintenance schedule be followed. A regular visual check and replacement of the high wear components will prevent larger scale maintenance in the future. The following areas of your MAV Straw Chopper should be checked on a regular basis.



**Ensure there are no loose tools, hardware or parts left on machine.
Clean up area after maintenance has been completed and prior to startup.**

BREAK-IN SERVICE MAINTENANCE - During first 50 hours

- Perform daily or 10 hour service (refer to **Daily Maintenance** in this section)
- Check drive belts for proper tension and adjust if necessary
- Check bearings

DAILY MAINTENANCE

- Check for oil leaks along hoses and connections
- Clean off residue from top of tailboards to prevent excess moisture from collecting
- Clean off residue from rear chopper floor
- Clean off residue from underneath tailboard along fins
- Check Straw Chopper Rotor Blades for excessive wear of metal, cracks or other visible damage
- Check Straw Chopper Rotor Blades for broken bushings
- Check Straw Chopper Rotor Blades for clearance between the stationary blades
- Check Belt Tension and that spring indicator is at indicator on guide
- Check that all rubber components are in place



- Check for loose hardware, broken metal pins or components and loose or broken header parts
- tighten hardware as required
- remove/replace broken pins and components

WEEKLY MAINTENANCE

- Check Drive Belt for wear and proper tension
 - adjust belt tension if required

- Grease belt tensioner/idler arm at 50 hour grease nipple (**F1**)
 - Use Extreme Pressure Lithium Grease

- Check Rotor, chopper housing and tailboard for build up of material and wear

ANNUAL MAINTENANCE

- Check rotor blades for wear and breakage
- Check fan blades for wear
- Check for oil leaks
- Check bearing
- Check bearing lock collar is locked
- Check drive belt wear
- Clean Straw Chopper Unit interior and exterior
- Check for loose hardware, broken metal pins or components



Review remainder of Operator's Manual for complete maintenance checks and procedures

3.2 Preventative Maintenance - Mechanical Systems

3.2.1 Straw Chopper Rotor Blade Wear

Recommended Service Interval - 10 hours daily

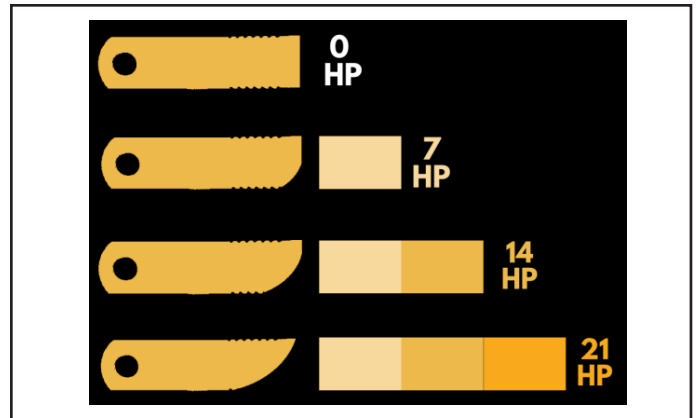
Look for excessive wear of metal at corners (A)

- wear limit is end of coated section
- accelerated wear occurs when wear is beyond this point

Look for: excessive wear of metal along cutting edge, cracks or other visible damage on blades and bushings, replace as necessary.

Replace blades as per the following instructions

Excessive blade wear increases and fuel consumption and chances of plugging. Illustration shows blade wear and additional horsepower required.



3.2.2 Straw Chopper Rotor Blade Replacement



IMPORTANT! Straw Chopper Rotor balance MUST be maintained

Note: If straw chopper blades are installed other than as directed to maintain rotor balance, damage to the straw chopper may result or performance may be significantly reduced.

Blades have been sorted by weight and may be color coded on blade edge



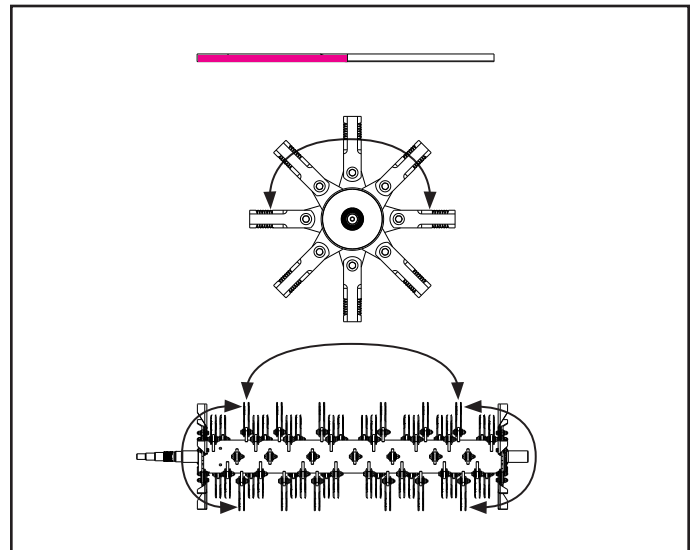
Ensure Blades with the same colored edge are installed opposite of each other and other end of the rotor.

- failure to assemble as noted will result in an unbalanced rotor

3.2.2.1 Replace BOTH blades on single support and BOTH blades on opposite support (180 deg). Also, replace the four (4) at the other end of the rotor, at the same axial distance from the balance ring.

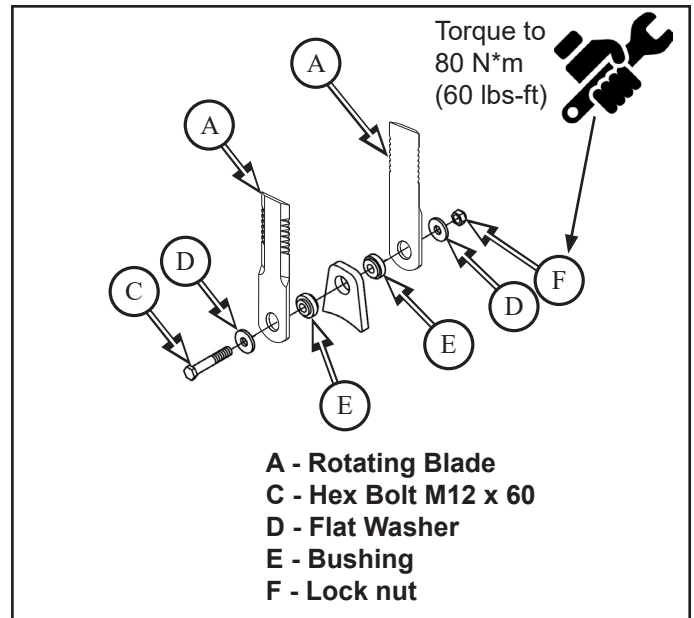
Eight (8) blades **MUST** be installed to replace one broken blade, or all the blades can be replaced at one time. This **MUST** be done to maintain dynamic balance, and to keep vibration to a minimum.

Never replace only one (1) blade for wear or breakage



3.2.2.1 Assemble blade pairs as per order shown (A to F)

CAUTION! If one (1) rotor blade breaks and the straw chopper must be operated without a replacement, then remove the damaged blade and the blade on the opposite support (180 deg). Also, remove the two (2) blades at the other end of the rotor, at the same axial distance from the balance ring.



3.2.2.2 If replacing blade mounting hardware, use only METRIC class 10.9 bolts (C) and class 10 DIN980V all steel lock nuts (F)

3.2.2.3 Use a torque wrench to tighten all nuts to the recommended values:
M12 nuts to 60 lbs-ft or 80 N*m

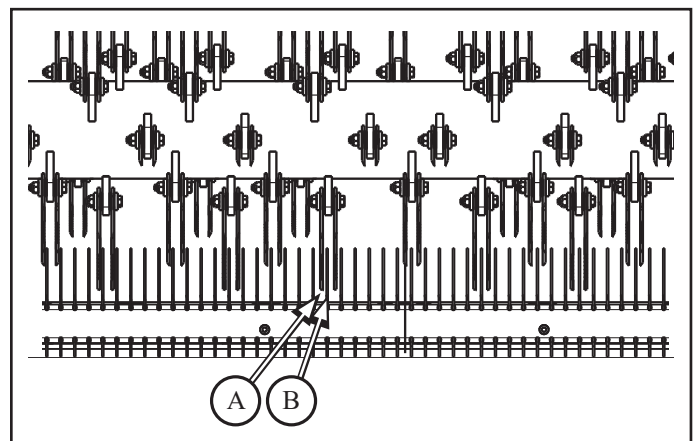
CAUTION: Always use METRIC class 10.9 bolts and matching class 10 all steel lock nuts when installing blades.

CAUTION: Ensure at least two (2) threads are showing beyond the nut after tightening

CAUTION: Ensure blades rotate freely

CAUTION: Do Not sharpen blades - replace as necessary

3.2.2.4 Always check for adequate clearance between the installed blades (A) and the stationary knives (B). Should be no less than 4mm (5/32in) of clearance. Check clearance of all blades, even those that are not replaced. Do not operate the straw chopper unless this clearance is maintained for all blades.



Note: Torque values listed are for chopper blade installation only, based on the strength of the bolt.
DO NOT use these values for different procedures or applications.

3.2.3 Straw Chopper Rotor Fan Blade Replacement

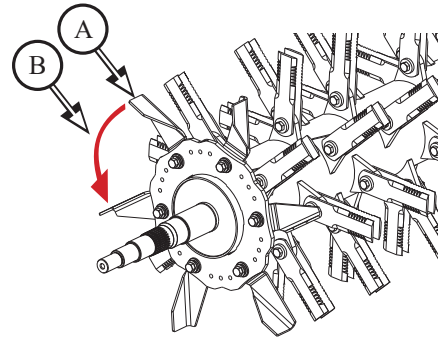
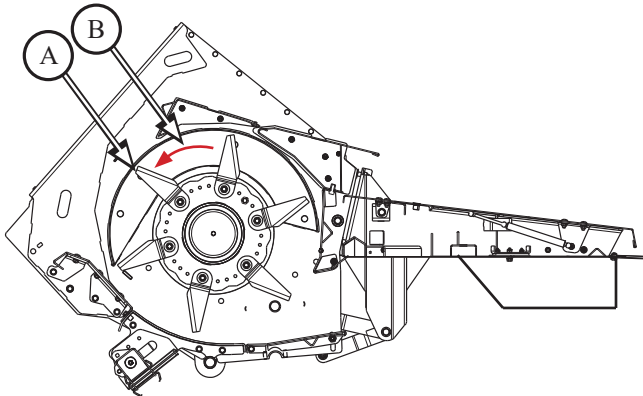


IMPORTANT! Straw Chopper Rotor balance **MUST** be maintained.

Note: If fan blades are installed other than as directed to maintain rotor balance, damage to the straw chopper may result or performance may be significantly reduced.



IMPORTANT! The fan blades (A), installed on the rotor end plate located inside the chopper shroud, must be installed in the direction shown (B). The straight edge of the blade cuts the air while the paddle trails behind and pushes the air.



Note: Fan Blade (A) Orientation

3.2.3.1 If replacing blade mounting hardware, use only METRIC class 10.9 bolts (C) and class 10 DIN980V all steel lock nuts (F)

3.2.3.2 Use a torque wrench to tighten all nuts to the recommended values:

M12 nuts to 60 lbs-ft or 80 Nm



CAUTION: Always use METRIC class 10.9 bolts and matching class 10 all steel lock nuts when installing blades.



CAUTION: Ensure at least two (2) threads are showing beyond the nut after tightening

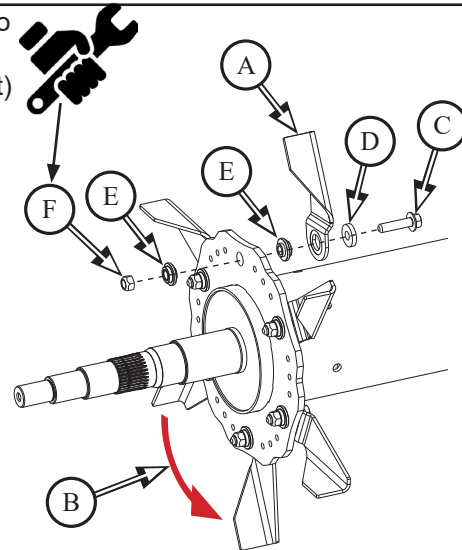


CAUTION: Ensure blades rotate freely



CAUTION: Do Not sharpen Fan blades, these do not need to be sharp

Torque to
80 N*m
(60 lbs-ft)

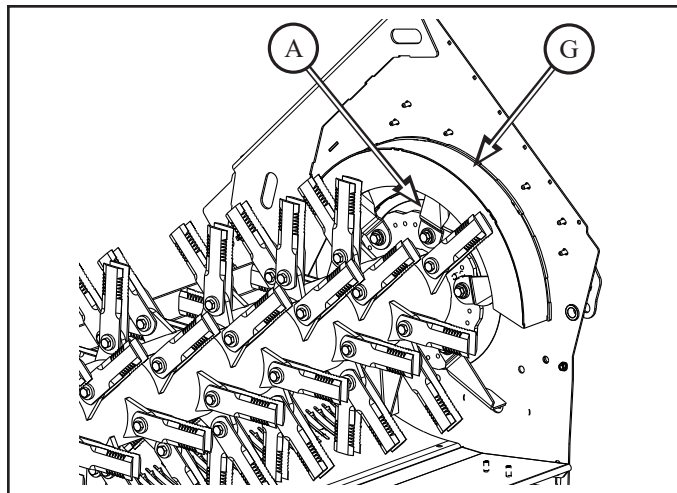


A - Fan Blade
B - Blade direction
C - Hex Bolt M12 x 50
D - Flat Washer
E - Bushing
F - Lock nut

Note: Torque values listed are for chopper blade installation only, based on the strength of the bolt.
DO NOT use these values for different procedures or applications.

3.2.3.3 Always check for adequate clearance between the installed fan blades (**A**) and inside of the shroud (**G**). Do not operate the straw chopper unless this clearance is maintained for all blades.

- both sides



Check all fasteners to ensure they have been properly tightened.
Rotate chopper rotor manually to ensure clearance of all blades.
When starting chopper, be sure all people are clear of the rear of the combine.



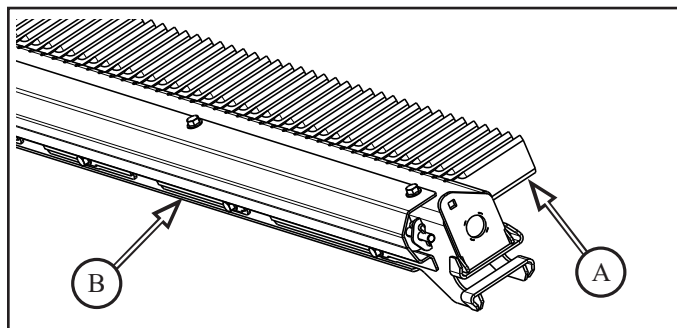
Start threshing module in low speed & listen for clearance problems.
If a knocking noise is heard stop machine immediately!
Fix problem & repeat procedure.
Progress to full power when everything is running smoothly at lower speeds.

3.2.4 Stationary Knife Blades

Recommended Service Interval - 10 hours - daily

3.2.4.1 Stationary Knife Blade Inspection

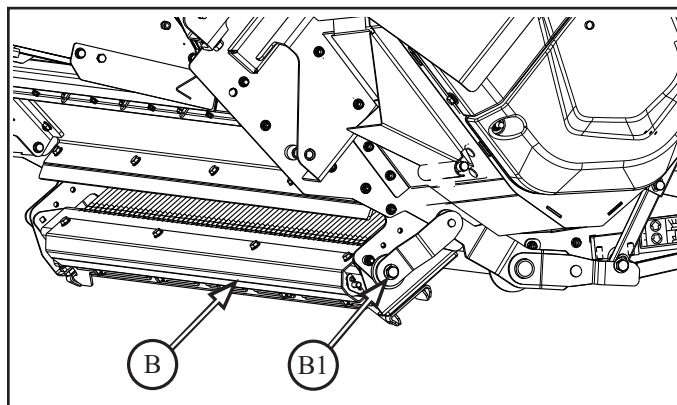
Check stationary knife blades (A) for excessive wear, damage or breakage



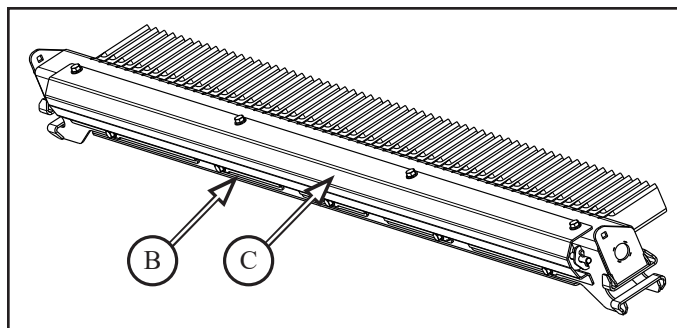
3.2.4.2 Stationary Knife Blade Replacement

If a stationary knife blade breaks:

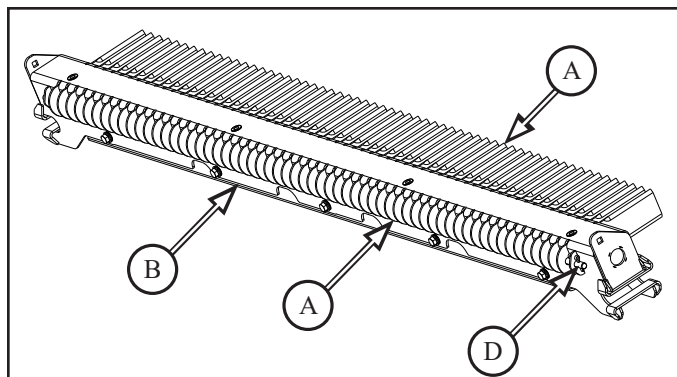
- remove knifebar assembly (B) from chopper:
 - remove knifebar assembly (B) mounting hardware (B1)
 - both sides
- place knifebar assembly (B) onto work surface



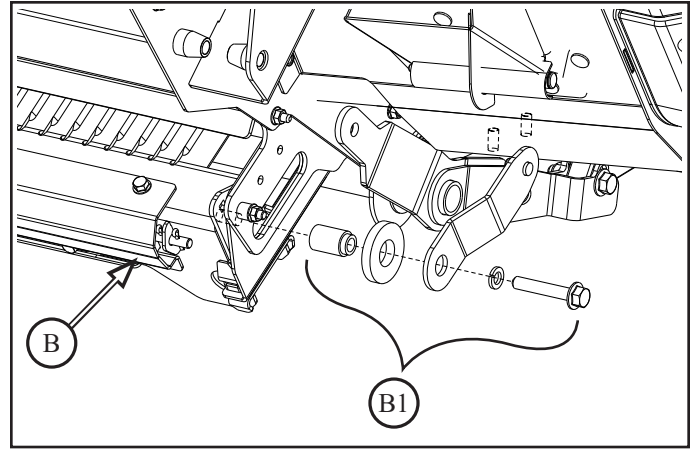
- remove the backplate (C)



- remove the rod (D) holding the blades in place
- replace the damaged blade (A)
- reinsert the rod (D)
- reinstall the backplate (C)



- reinstall knifebar assembly (B) into chopper
- reinstall knifebar assembly (B) mounting hardware (B1)
- assemble as shown in illustration
- both sides



Note: Stationary Blades can be rotated to use opposite edge and resharpened for these do not require to be in balance

Check the clearance between the chopper rotor blades and stationary blades to ensure there is adequate space to operate without obstruction:

- There should be no less than 4mm / 5/32in of clearance between each blade edge and the closest stationary blade
- Clearance problems may occur when chopper rotor blades and/or stationary blades become deformed by hard objects which pass through the combine - check and replace components as necessary
- Repetitive ticking or knocking sounds emitted from the straw chopper may signal a minor clearance problem - the straw chopper should be stopped immediately and examined and problem resolved

3.2.5 Drive Belt

Recommended Service Interval - 70 hours - Weekly

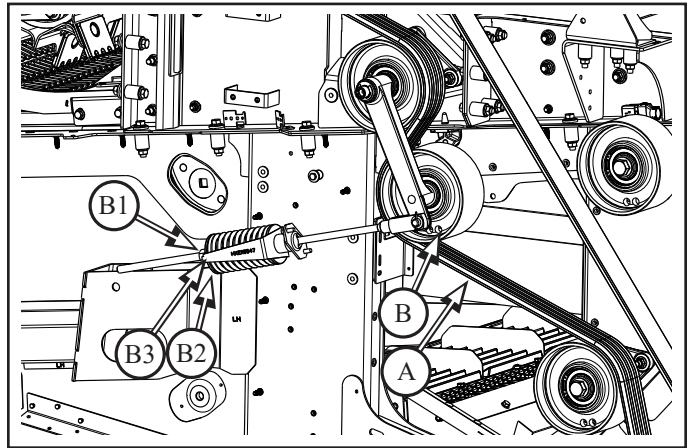
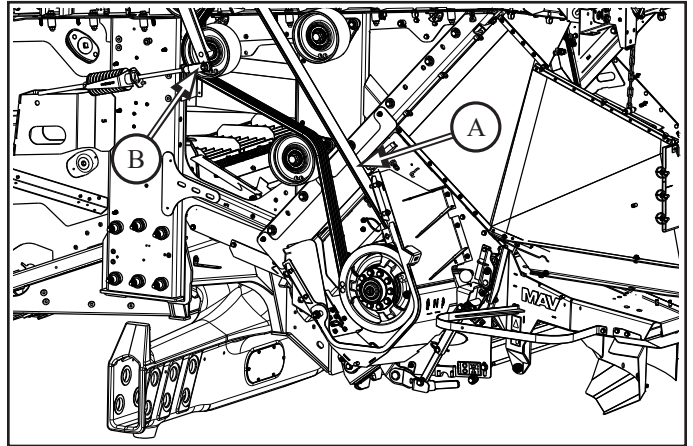
Follow OEM service interval for Straw Chopper drive belt (A)

Reinstall drive shields after all belt adjustments have been made.

If excessive belt temperatures are evident, or the Straw Chopper seems to be losing excessive speed during operation in tough or heavy conditions, the belt tension is not sufficient and should be adjusted immediately. Look for cracks, frayed edges, or any imperfections that may result in breakage.

To adjust tensioner (B) of the drive belt (A):
Tighten or loosen tension nut (B1) in such a way that the length of the spring (B2) equals the length of the gauge (B3).

If a belt edge shows excessive wear, check for mis-alignment of the sheaves and correct if necessary.



Keep Hands Out!



NEVER OPERATE WITHOUT SHIELDS IN PLACE!

3.2.6 Bearing

Recommended Service Interval - Life Time

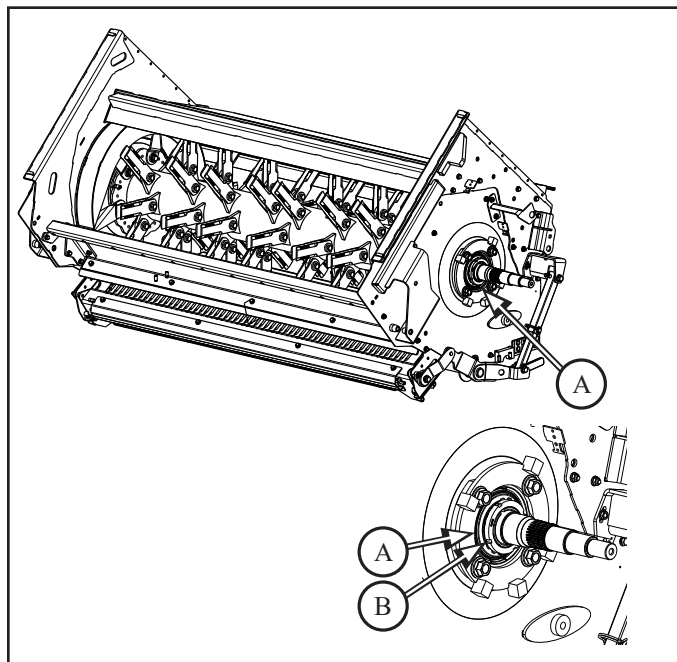
**** DO NOT LUBRICATE ****

Bearing (A) comes pre-greased, there is no requirement to grease

- both sides

Check bearing lock collar (B) is locked

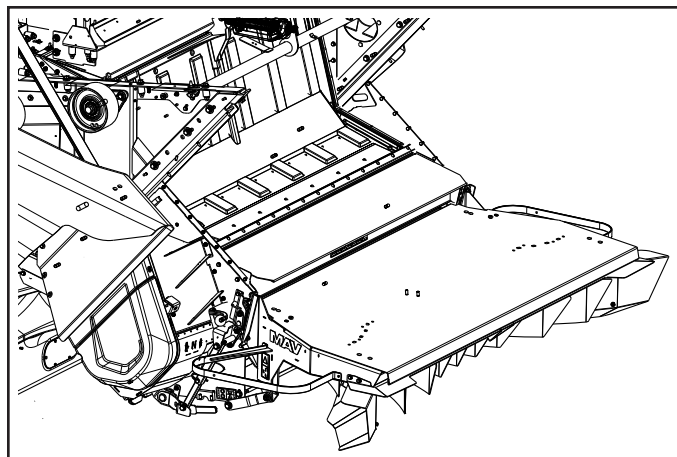
- both sides



3.2.7 Cosmetic

Recommended Service Interval - 10 hours - Daily

Clean off residue from top of tailboard, shields and chopper to prevent excess moisture from collecting.

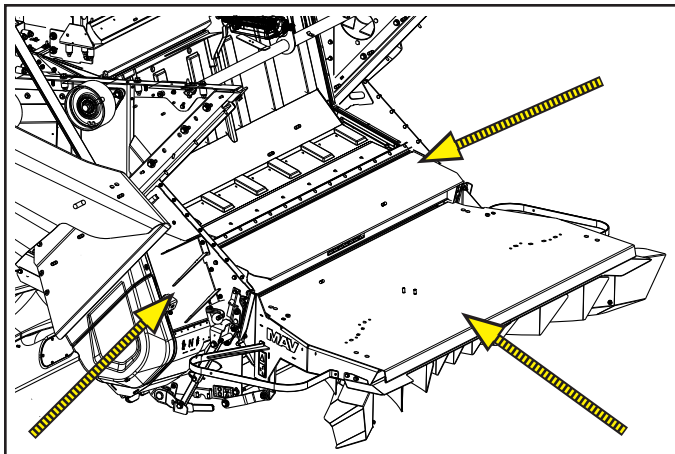


3.2.8 Cleanout

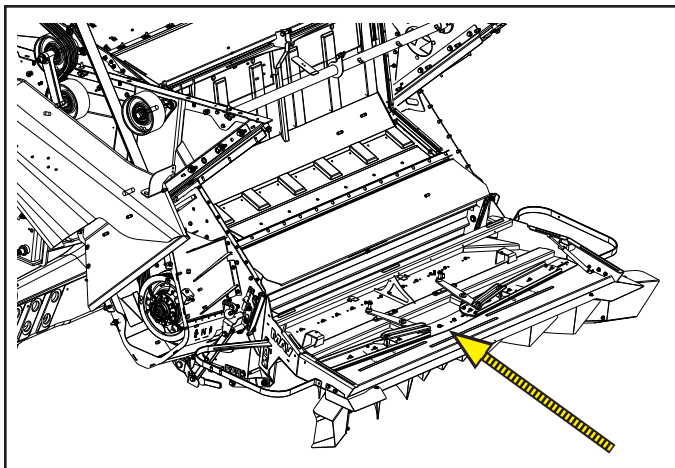
Recommended Service Interval - As required or Annually

Thoroughly clean the out debris from Straw Chopper inside and outside with compressed air.

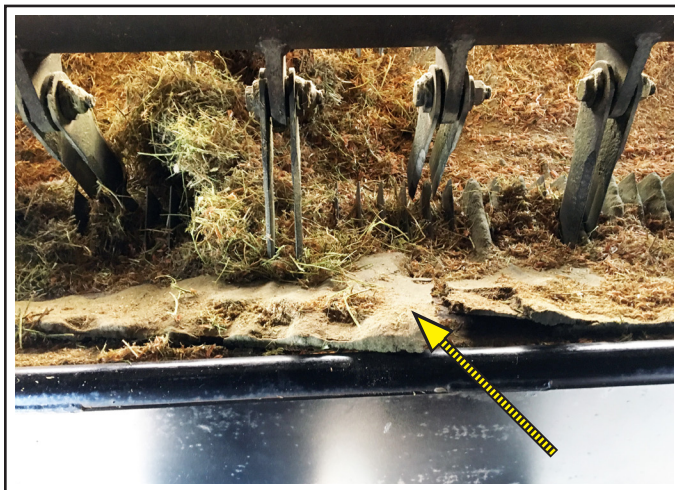
Clean off residue from top of tailboard, shields and chopper to prevent excess moisture from collecting.



Lift tailboard cover up and clean out debris from inside tailboard



Check and clean chopper floor and tailboard fins for material buildup from green material (Lentils, Peas, etc)



3.2.9 Tailboard

Recommended Service Interval - As required or Annually

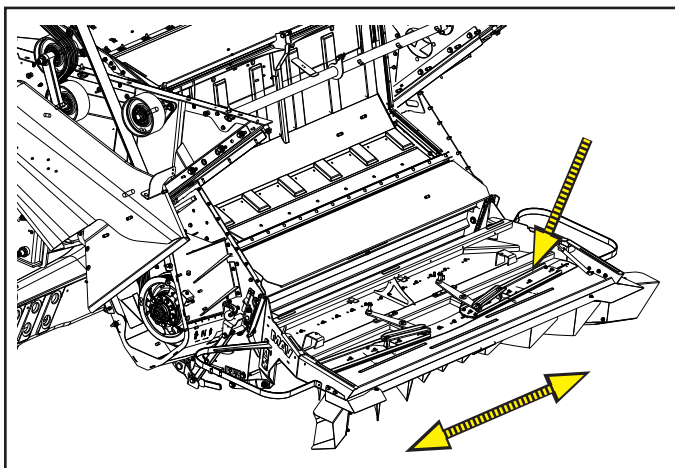
Clean off residue from top of tailboard to prevent excess moisture from collecting as noted in the Cleanout section.

Check and clean tailboard fins for material buildup from green material (Lentils, Peas, etc)



Check motion of fins and for binding

- 2 people required for test
 - 1 in cab on controls and 1 observing fin movement
- engine is not required to be on to perform test, actuators can be controlled with accessory power on
- in cab, adjust fin settings on screen to min thru to max spread
 - observe fins are moving inwards to outwards
 - observe actuators and linkages in tailboard cavity are moving freely
- actuators will time out if there is too much resistance
 - key cycle to reset



3.2.10 Miscellaneous

Recommended Service Interval - as required

Check tire pressures on combine

- refer to the OEM specifications of the tire and adjust tire pressures accordingly.



4 Chopper Functions on Monitor

4.1 Redekop MAV Chopper

4.1.1 The Redekop MAV Chopper maintains factory JD chopper functions, including spread width, wind compensation, knifebar actuation (if equipped), and windrow (if paired with premium residue package).

4.1.2 For instructions on these functions, refer to the JD manual

5 Troubleshoot

5.1 Broken blade?

If a blade breaks due to a foreign object coming through the straw chopper, always replace eight (8) blades at a time. Refer to section 3.2.2 for replacement blade procedure. **Never replace only one blade for wear or breakage to maintain balance of rotor.**

5.2 No spare blade replacement available?

If a blade breaks and the straw chopper must be operated without a replacement, then the damaged blade and the one directly opposite and the pair on the opposite end must be removed to maintain rotor balance.

5.3 Is a knocking sound heard when starting up the chopper?

Check for adequate clearance between the installed blades and the stationary blades. A minimum of 4mm or 5/32" is required. Check clearance of all blades, even those that are not replaced. Do not operate the straw chopper unless this clearance is maintained for all blades.

5.4 Insufficient clearance of straw chopper rotor blades past the stationary blades?

Check that the stationary blades are centered in the middle of the slots in the straw chopper floor. If they are not, the knife bar must be moved over.

5.5 Still insufficient blade clearance?

If you do not have sufficient clearance and the stationary blades are in the position specified in point #3.3, the rotor must be moved over. Remove all shields to access the rotor bearings:

- if rotor shifted one way, loosen bearings and re-center and check for blade clearance.
- if localized blade misalignment, tweak blades very carefully for desired clearance

Retighten bolts making sure the rotor does not get pulled over to one side in the process. Retorque bolts to specifications.

5.6 Not cutting properly or straw plugging in front of chopper?

Check your rotor blades for wear and flip or replace them if necessary. Tough conditions will also play a factor in how well the straw chopper is or isn't cutting.

5.7 Is there rowing behind your straw chopper?

Adjust the tailboard fins. Ensure that all residue is distributed and fed evenly across the width of the chopper. In most cases, rowing results because the straw from the 2nd and 3rd fin from the outside lays straw on top of that from the outside fin. Stand above chopper in a safe place and observe distribution. Adjust fins as necessary.

5.8 Are your drive belts slipping?

- Check belt
 - for wear, rips or any glazing
 - glazing indicates sign of belt slipping
- Check the tension of your belt
 - end of the spring must align with the tension indicator
 - If the belts are too loose you'll get insufficient traction and cause excessive wear on the belts
 - If the belts are too tight there will be excess wear on the belt and on the sheave
- Check belt tensioner
 - freely moving and not binding
 - set correctly
- Check drive sheaves
 - are aligned
 - visually or by alignment tool
 - check paint wear in sheave grooves. Should be even between all grooves
 - excessive wear on grooves of sheave results in poor belt seat and will result in belt slip

5.9 Is there chaff / grain embedded in the drive belt?

Determine where the chaff is coming from and redirect chaff flow away from the belt.

5.10 If the tailboard fin adjustment actuators time out, check the tailboard for excess material binding or stopping the pivoting motion preventing smooth sliding of the fins.

5.11 If low or no chopper speed:

- check if gearbox is in correct speed for desired crop
- check chopper speed sensor on right side of chopper under the shield. Two (2) bolts should be present on idler wheel which the sensor should pick up. Sensor light will be on to show it is sensing when target is aligned with sensor

5.12 Actuator control / Monitor issues as a result of Electrical problems

- Check harnesses are not pinched or damaged
- Check connectors are seated to each other
- Check pins in connectors are fully seated and clean
 - disconnect harness connector, review both male and female ends that pins are fully seated

6 FAQ

6.1 How long do the blades last?

A: Blade longevity depends heavily on variables like soil abrasiveness and crop conditions, etc. A carbide coated heat-treated blade typically averages 150 hours of service per edge, resulting in a total lifespan of approximately 300 hours after flipping the blade.

6.2 What is the advantage of a carbide coated heat treated blade?

A: The carbide coated blade has carbide coating on a single side making it a self-sharpening edge that maintains peak cutting efficiency.

6.3 How does the straw chopper perform in flax and soybean?

A: While these crops accelerate wear, the self-sharpening carbide coating ensures the blades maintain a sharp edge for superior performance in flax and soybeans. To ensure clean cuts through the tough stalks, always install new blades before starting a flax harvest and also recommended for canola to reduce feeding problems. It is advisable to change rotor blades only after ground engaging crops have been harvested to extend blade life.

6.4 Any special requirements for chopping corn?

A:  **Yes, In corn, the chopper MUST run at a slower speed (800-1200 rpm). The stationary blades must be pulled completely out of the chopper housing** while only the rotor blades dice up the husks and stocks.

6.5 Does the straw chopper rotor need to be rebalanced each time you need to replace blades?

A: No, rebalancing is not required provided that the blades are replaced as a complete set or installed according to the guidelines in section 1.4

6.6 How far does the straw chopper spread?

A: In ideal conditions, the chopper can achieve a 50 foot plus (15m) spread width. Reaching this maximum distance requires the chopper to be full, straw be uniformly fed into the chopper - specifically to the outer edges and the straw chopper must be adjusted to cut medium length straw. For narrower coverage, reposition the tailboard fins to customize your spread pattern.

6.7 Do Redekop blades fit into all factory choppers?

A: No, you must have a Redekop Straw Chopper or a Redekop Upgrade Rotor to use the Redekop blades. Update kits to fit Redekop blades to other combines are available. Contact your Redekop dealer for more information.

7 Warranty

Redekop Manufacturing 2014, hereinafter referred to as “Manufacturer”, warrants each new Redekop Straw Chopper sold by the Manufacturer to be free from defects in material and workmanship, under normal use and service, for a period of one (1) year after the date of delivery to the original retail purchaser. The Manufacturer will, at its option, replace or repair, at the Manufacturer’s factory, or at a point designated by the Manufacturer, any part or parts which shall appear to the satisfaction of the Manufacturer upon inspection at such point, to have been defective in material or workmanship. This Warranty does not obligate the Manufacturer to bear any transportation charges in connection with the replacement of defective parts.

This Warranty shall not apply to any alteration which shall have been installed or operated in a manner not recommended by the Manufacturer; nor to any repaired, altered, neglected or used part in any way which, in the Manufacturer’s opinion, adversely affects its performance; nor to any modification in which parts not manufactured or approved by the Manufacturer have been used; nor to any accessories installed on the chopper where the accessory manufacturer has its warranty; nor to normal maintenance or replacement of normal service items.

Manufacturer reserves the right to modify, alter, and improve any chopper or parts without incurring any obligation to replace any chopper or parts previously sold with such modified, altered or improved chopper or part.

THIS WARRANTY, AND THE MANUFACTURER’S OBLIGATION HEREUNDER, IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED, OR OF FITNESS FOR A PARTICULAR PURPOSE, and all other obligations or liabilities, including special or consequential damages or contingent liabilities arising out of the failure of any chopper or part to operate properly. No person is authorized to give any other warranty or to assume any additional obligation on the Manufacturer’s behalf unless made in writing and signed by an officer of the Manufacturer.

This Warranty is effective only for the original purchaser.

Redekop Manufacturing 2014
Saskatoon, SK Canada



Activate your warranty.

Scan the code or visit www.redekopmfg.com/warranty

Redekop MAV Straw Chopper X9		
Conditions		Warrantability
Straw Chopper Rotor Component Conditions		
A	Breakage due to foreign object	NOT WARRANTABLE
B	Failure due to wear - not replaced soon enough	NOT WARRANTABLE
C	Nicks on blades (foreign object)	NOT WARRANTABLE
D	Uneven wear	NOT WARRANTABLE
E	Excessive wear	NOT WARRANTABLE
F	Fan blade wear	NOT WARRANTABLE
Drive Component Conditions		
A	V Belt breakage or burn due to slippage/improper tension	NOT WARRANTABLE
B	V Belt surface cracks (due to age)	NOT WARRANTABLE
Outside Visible Surface Conditions		
A	Cosmetic damage	NOT WARRANTABLE
B	Faded appearance	NOT WARRANTABLE
C	Punctures due to foreign objects	NOT WARRANTABLE
D	Paint flakes off due to improper application	WARRANTABLE
E	Tailboard fin wear	NOT WARRANTABLE
Straw Chopper Housing		
A	Cracked due to field damage	NOT WARRANTABLE
B	Chopper floor wear	NOT WARRANTABLE
C	Tailboard damage (collision)	NOT WARRANTABLE
D	Fire due to debris not cleaned out regularly	NOT WARRANTABLE
Electronics		
A	Harness wires break/tear	NOT WARRANTABLE
B	Harness wires separate from connectors	WARRANTABLE
C	Harness connectors break	WARRANTABLE

All warranty claims must be submitted with photographs of problem, photo of serial #

Warranty not provided when foreign object enters straw chopper and seizes or damages unit.

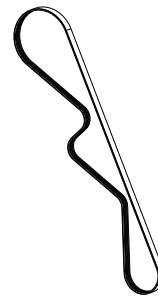
Warranty not provided on items due to wear

Warranty not provided on frame if driveline guards are not in place during operation

8 Standard Wear Replacement Parts

Reference Parts Manual for Part Numbers

Straw Chopper Drive Belt (OEM)



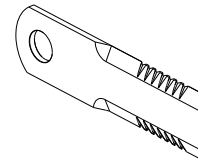
Straw Chopper Rotor Bearing



Straw Chopper Rotor Blade Kit

- Straight Serrated Carbide Blade (x8)

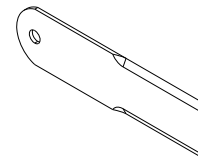
To ensure order accuracy for replacement blades, please provide the blade part number (stamped on blade) and specify the total quantity required.



Knifebar Blade Kit

- Straight Knifebar Blade (x10)

To ensure order accuracy for replacement blades, please provide the blade part number (stamped on blade) and specify the total quantity required.



Straw Chopper Rotor Blade Bushing Kit (x20)



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www.redkopmfg.com

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