REDEKOP™

COMPLETE MAV CHOPPER HSG

JOHN DEERE S7 SERIES

INSTALLATION MANUAL

PRODUCT NUMBER: **340-110WC**

CD0303-04_R0

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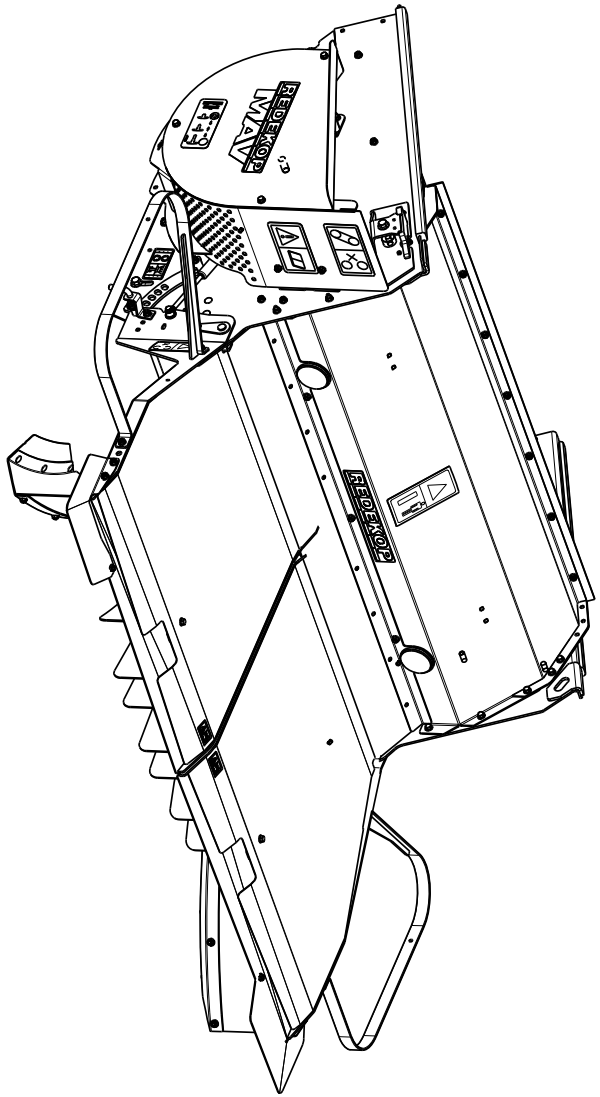

MAV Housing Upgrade JD S7 Series
Installation Manual

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0 Safety

0.1 Introduction

0.1.1 IMPORTANT: Read through this instruction thoroughly and familiarize yourself with the machine before removing these components. Do not skip steps or perform them out of order.

This instruction manual explains the proper procedure for preparing the combine and removing the Factory Spreader Components in order to install the Redekop MAV Chopper

0.2 Recognize Safety Information

0.2.1 This is a safety-alert symbol. When you see this symbol on your machine 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 equipment 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 machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

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

Other languages are available for this machine. Please contact Redekop

0.5 Safe Operating Practices

0.5.1 DO NOT stand near the 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 Straw Chopper only when all guards are correctly installed.

Before moving away, always check immediate vicinity of 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.

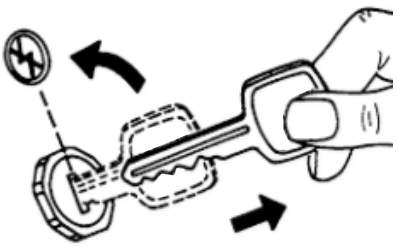
Never leave combine unattended as long as engine is running.

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 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.

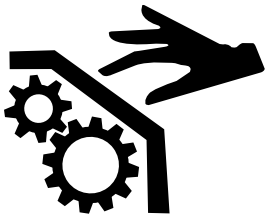
Keep hands, feet and clothing away from power-driven parts. Tie long hair behind your head. Do not wear rings, jewelry, a necklace, a necktie, scarf, or loose clothing when you work near machine or moving parts. If these items were to get caught, severe injury could result.

Securely support any 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 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 brand 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 Straw Chopper damage.

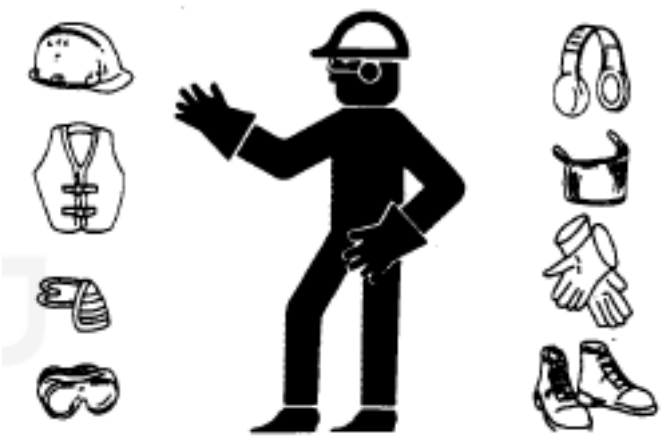
Follow recommended procedure for removal and installation of components in the manual.

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 Sound Level

0.16.1 This product produces sound pressure levels in excess of 90 dB within 10m of discharge area.

Hearing protection is required!

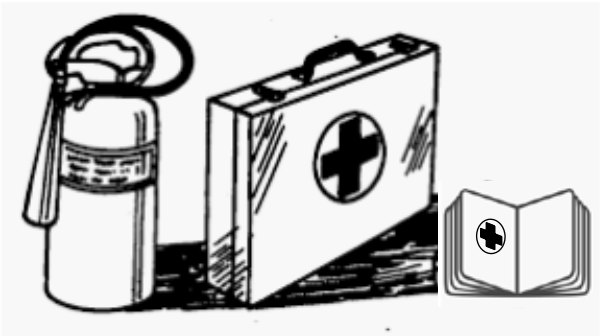
Interference with speech communication, acoustic signals is possible.

0.17 Prepare for Emergencies

0.17.1 Be prepared if a fire starts.

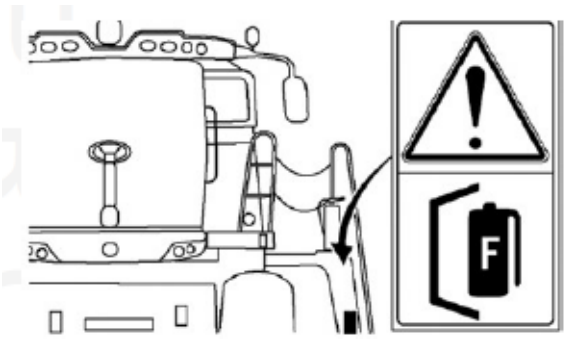
Keep a first aid kit and fire extinguisher handy.

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



0.18 Fire Extinguisher

0.18.1 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 extingisher'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.

0.19 Remove Accumulated Crop Debris

0.19.1 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.

0.20 In the Event of Fire

0.20.1 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 guidlines:

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.

Torque Table		
Nominal Size	Class 8.8	Class 10.9
	Nm / (ft-lbs)	Nm / (ft-lbs)
M8 - flanged	27 / (20)	39 / (29)
- non flanged	25 / (18)	35 / (26)
M10 - flanged	54 / (40)	57 / (42)
- non flanged	49 / (36)	70 / (51)
M12 - flanged	93 / (69)	134 / (98)
- non flanged	85 / (63)	121 / (90)
M16 - flanged	231 / (171)	331 / (244)
- non flanged	210 / (155)	301 / (222)

0.21 Safety Decals

Pictorial Safety Signs

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

Hand Injury / Rotate Danger
RP871

Projectile Hazard / Stand Clear
RP872
Stay clear of these components when the engine is running. Kickback hazard when removing access panel.

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.

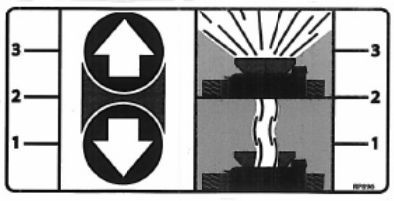
Keep Hands out of Belt Area / Rotate Danger
RP874
Do not touch any moving parts.
Wait until all moving parts have stopped.

High Pressure Fluid Hazard / Check Service Manual
RP876

Pinch Point Hazard
84394351

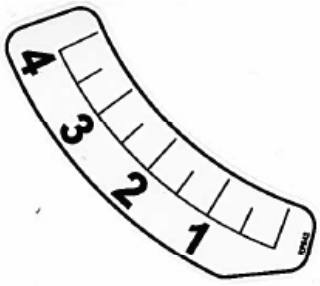
0.22 Information Decals

Windrow Floor Adjustment
Wide Spread / No Spread
RP896



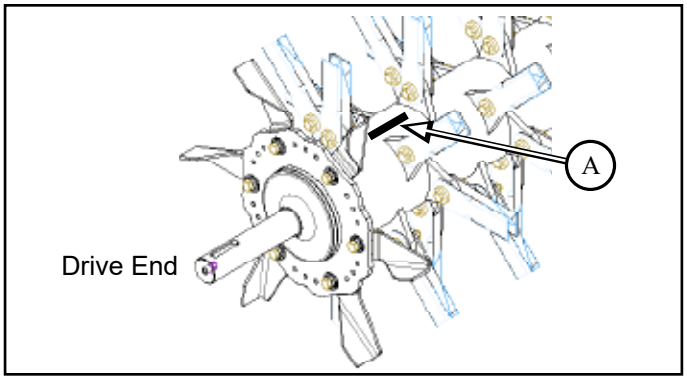
Redekop Straw Chopper Serial Number Plate
RP1515

Knifebar Adjustment
RP942



0.23 Serial Number

1. Rotor serial number (A):
- stamped on the rotor, located on the drive end



2. Straw chopper serial number plate (B):
- located on the chopper wall, non-drive side

1 OEM Chopper Preparation

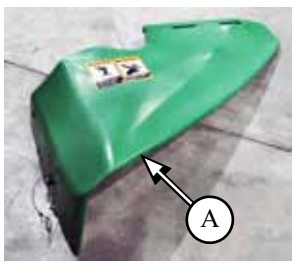
1.1 Position Chopper

1.1.1 Move chopper (**A**) rearwards approximately 90% of actuator stroke

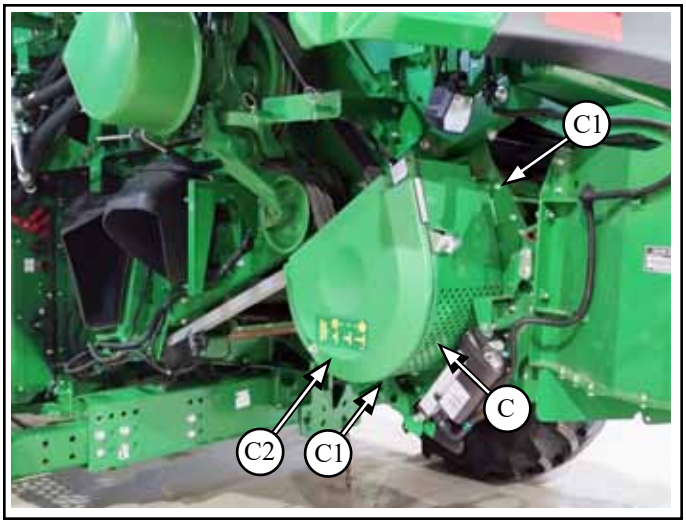
1.1.2 Partially engage knifebar (actuators (**B**) partially extended) if equipped

1.2 Shield Removal

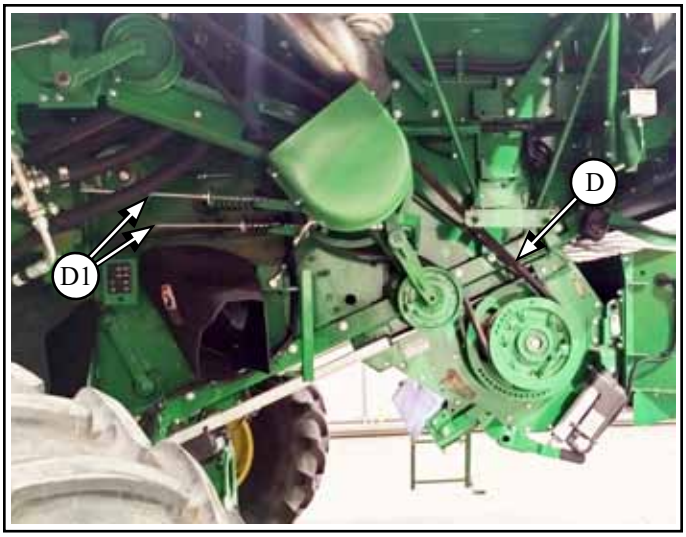
1.2.1 Remove large drive shield (**A**) secured by quick pins (**A1**) x4
- to be reinstalled



1.2.2 Remove drive shield (**C**) with cover (**C2**)
- not to be reused



1.2.3 Detension chopper drive belts (**D**) by loosening spring tensioners (**D1**) x2
- the raised chopper will slightly detension the belts but not enough to remove drive belts



1.2.3.1 Remove chopper drive belts (**D**) off of chopper drive sheave (**D2**)

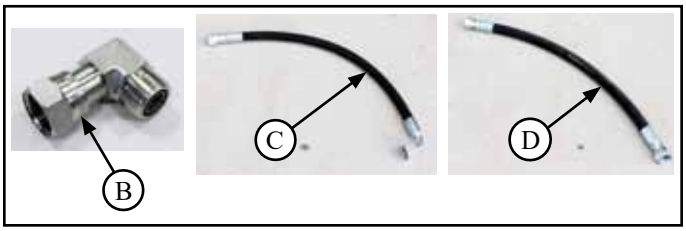
If combine is equipped with the hydraulic power spreader tailboard , the tailboard will be removed, but the hydraulics can remain on the combine or be removed.
- see section 1.3 to leave the hydraulics on the combine
- see section 1.4 to remove the hyd pump, hyd block and hyd lines to the spreader

The below instructions and pictures are for a S700 with an advanced power cast tailboard. If your system is different than shown, follow the procedure although the parts may have slight variations.

1.3 Procedure to Leave Hydraulics on Combine

Parts List:

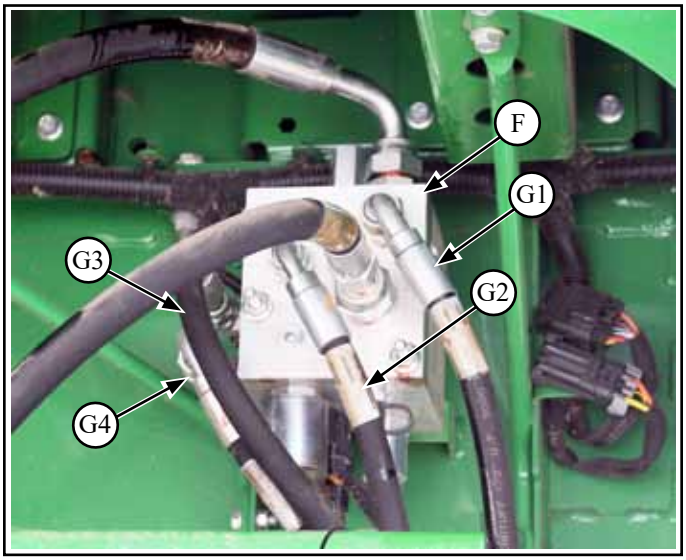
H38-1010FFX Fit Hyd 90deg
10 MORF - 10 FORFX Swivel (**B**) Qty 1
HH122 Hose Hyd .5 x 24L
8 FORFSX90 - 10 FORFSX (**C**) Qty 1
HH123 Hose Hyd .5 x 24L
8 FORFSX - 10 FORFSX (**D**) Qty 1



1.3.1 Use vacuum pump D15032NU on resevoir fill spout which will allow removal of hydraulic components without draining the reservoir.

1.3.2 Remove power spreader hydraulic lines (**G1 & G2**) from front of hydraulic block (**F**) - place onto top of spreader

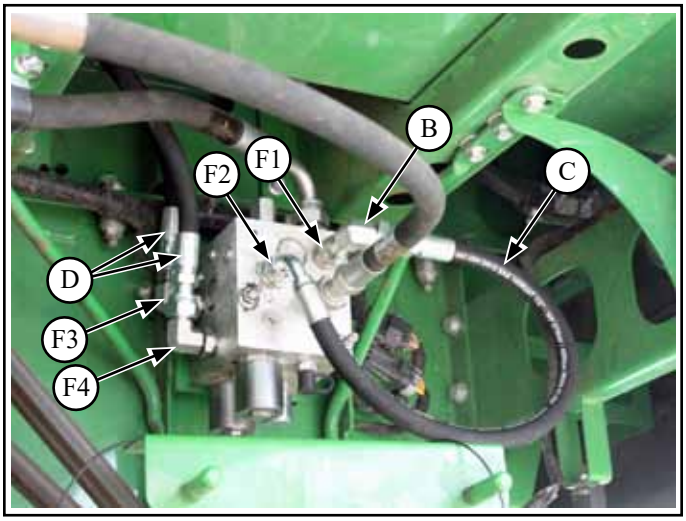
1.3.3 Remove power spreader hydraulic lines (**G3 & G4**) from side of hydraulic block (**F**) - place onto top of spreader



1.3.4 Install hydraulic fitting (**B**) into front hydraulic block port (**F1**)

1.3.5 Install hydraulic line (**C**) into fitting (**B**) and into front hydraulic block port (**F2**) creating a loop

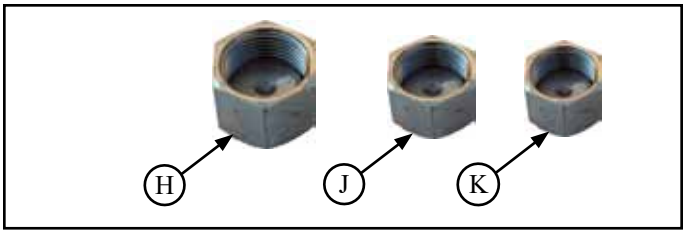
1.3.6 Install hydraulic line (**D**) into side hydraulic block ports (**F3 & F4**) creating a loop



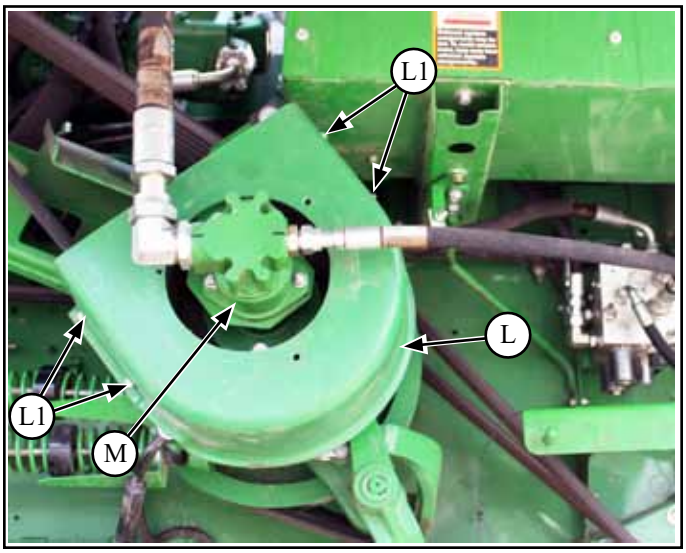
1.4 Procedure to Remove Hydraulics from Combine

Procedure to remove pump (**M**), hydraulic block (**S**) and lines to spreader motors from combine if equipped with hydraulic power spreader

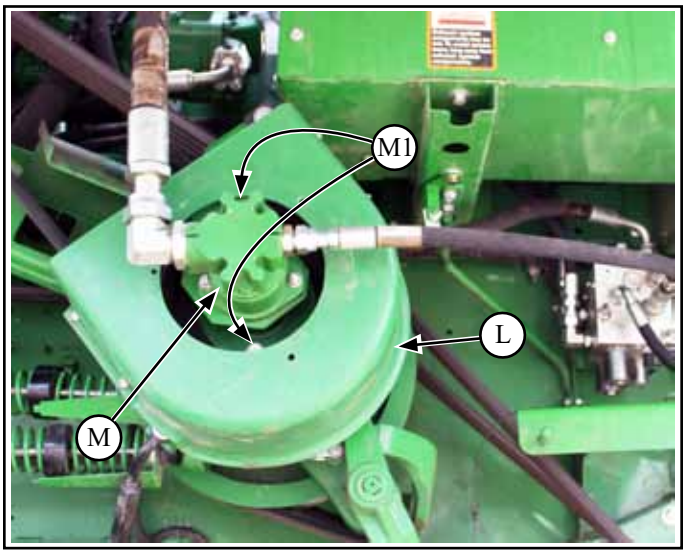
Parts List:
H14-20F Fit Hyd Cap 20 FORS (**H**) Qty 1
H14-16F Fit Hyd Cap 16 FORS (**J**) Qty 1
H14-12F Fit Hyd Cap 12 FORS (**K**) Qty 1



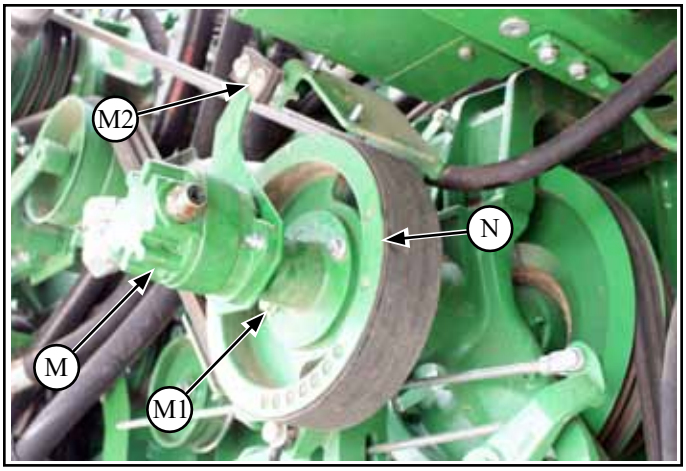
1.4.1 Remove shield (**L**) from brackets (**L1**) around hydraulic pump (**M**)



1.4.2 Through opeing in shield around pump, remove hydraulic pump (**M**) from sheave (**N**)
- disconnect plate (**M2**) from bracket
- disconnect pump (**M1**) from sheave (**N**)
- tie up pump, shield and hoses in order to work on sheave



View with shield and hose removed for reference of hardware and brackets behind shield

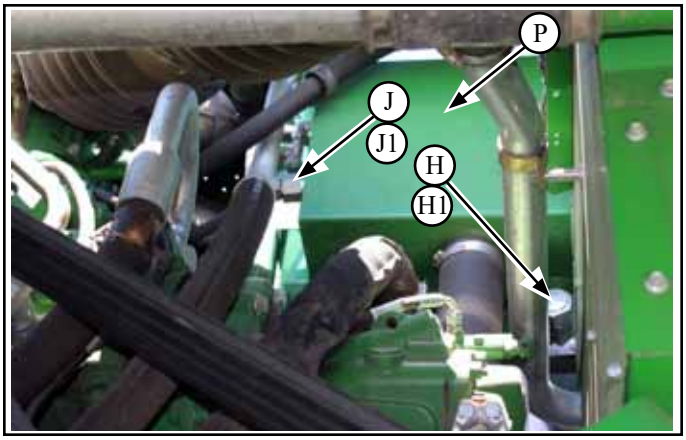


1.4.3 Drain oil from resevoir (**P**) (approx. 15 gals) or use vacuum pump D15032NU on resevoir fill spout which will allow removal of hydraulic components without draining the reservoir

1.4.4 Disconnect hydraulic lines from resevoir (**H1**) and line (**J1**)

1.4.5 Install hydraulic cap (**J**) or (**K**) onto resevoir port

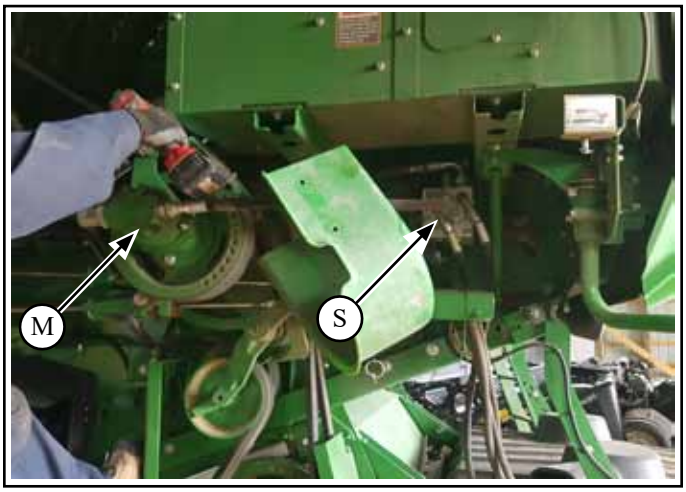
1.4.6 Install hydraulic cap (**H**) onto resevoir port



1.4.7 Remove hydraulic pump (**M**) and disconnect hydraulic hoses to hydraulic block (**S**)

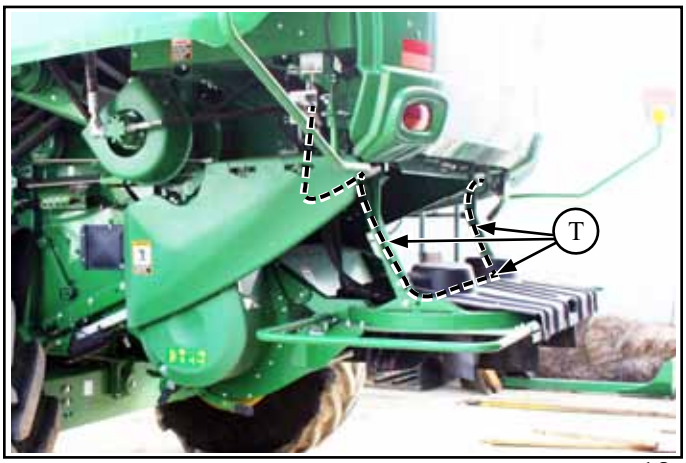
1.4.8 Remove hydraulic block (**S**)

1.4.9 The pump (**M**) and hydraulic block (**S**) are not to be reused with the MAV chopper and can be stored



1.4.10 Remove wire harness (**T**) connected to the hydraulic block and spreader from the spreader and arms. Keep harness connected to hydraulic block.

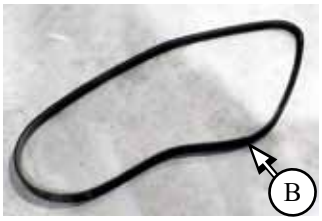
1.4.11 Tie up harness (**T**)

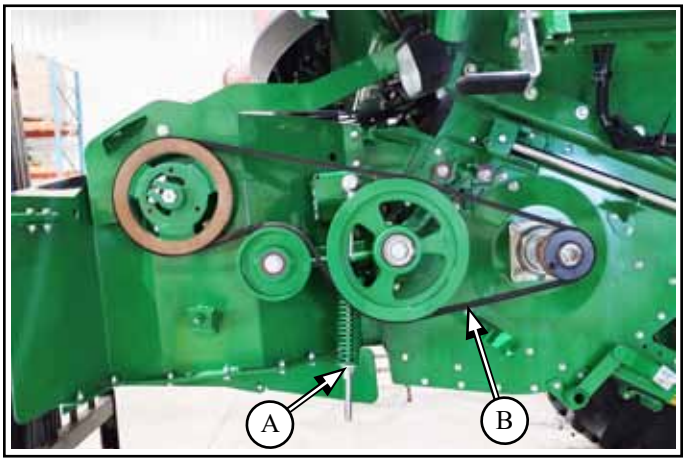


1.5 Tailboard Removal - Premium Power Cast

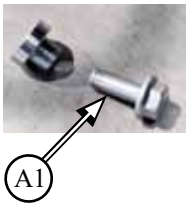
1.5.1 Loosen tailboard drive belt tensioner (**A**)

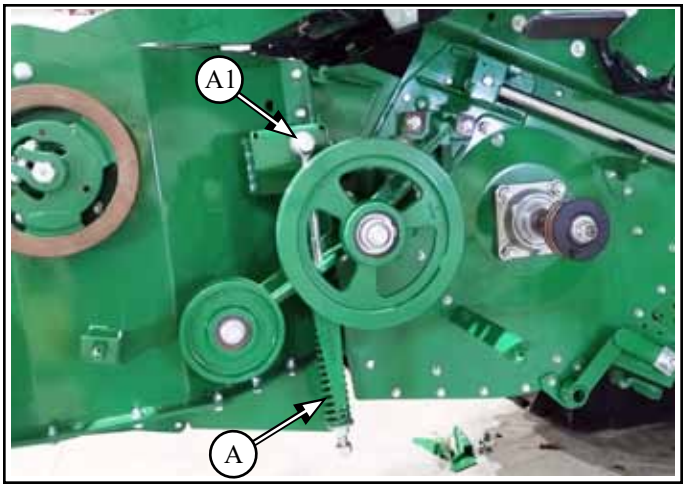
1.5.2 Remove tailboard drive belt (**B**)



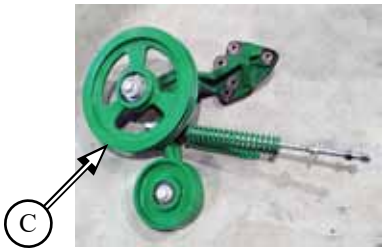


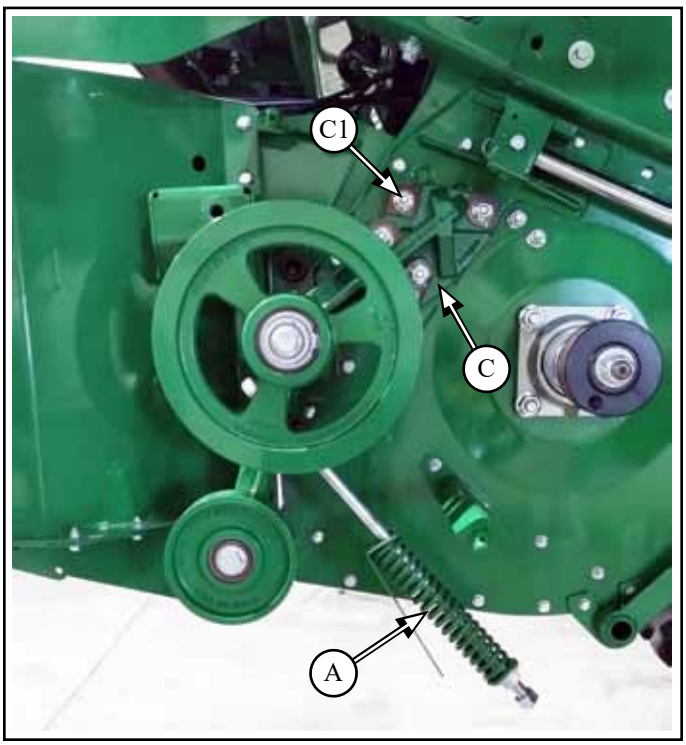
1.5.3 Remove tailboard spring tensioner top bolt (**A1**)
- not to be reused





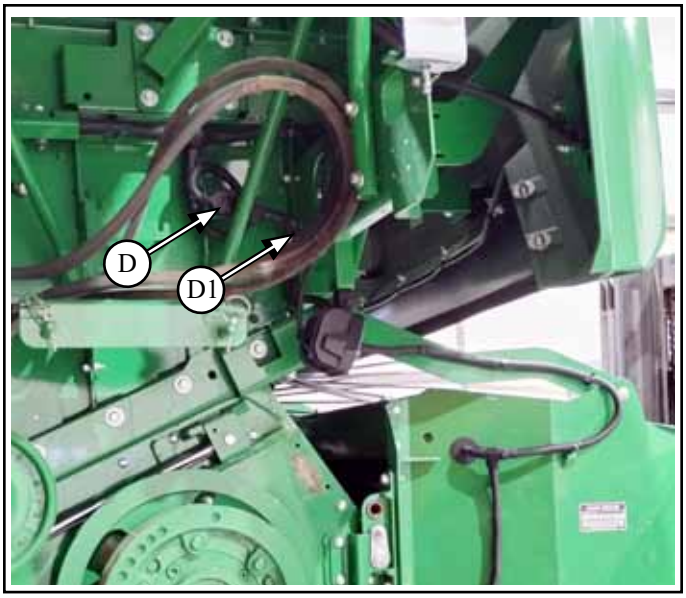
1.5.4 Remove tailboard drive assembly (**C**)
- not to be reused
- mount hardware (**C1**) not to be reused





1.5.5 Disconnect tailboard harness connector (**D**)

Note: Disconnecting the harness will prevent the chopper actuators from adjusting until it is plugged in again.
Functionality is also restored by plugging in RP1737 to the main harness. Section 3 provides details.
Actuator adjustment not necessary for chopper removal but will assist in installation of new chopper

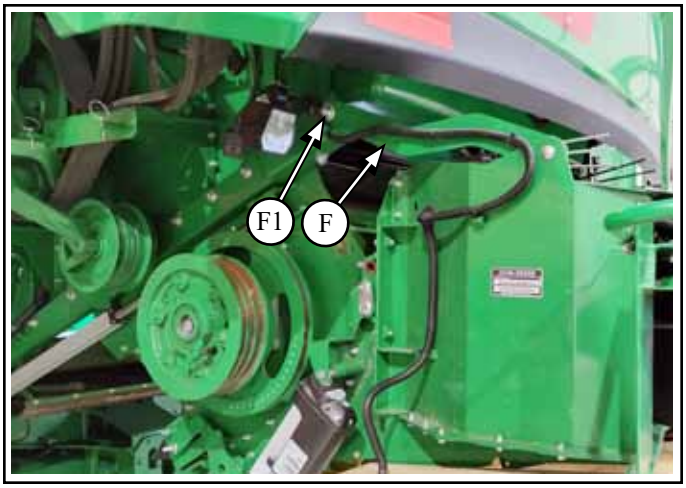


1.5.5.1 Disconnect p-clips and connectors (**D1**) securing tailboard harness to combine
- to be reinstalled

1.5.6 Ensure chopper is in a raised position that is easily accessible for a forklift to reach the tailboard and chopper.

1.5.6.1 Raise pallet (**E**) below tailboard for support

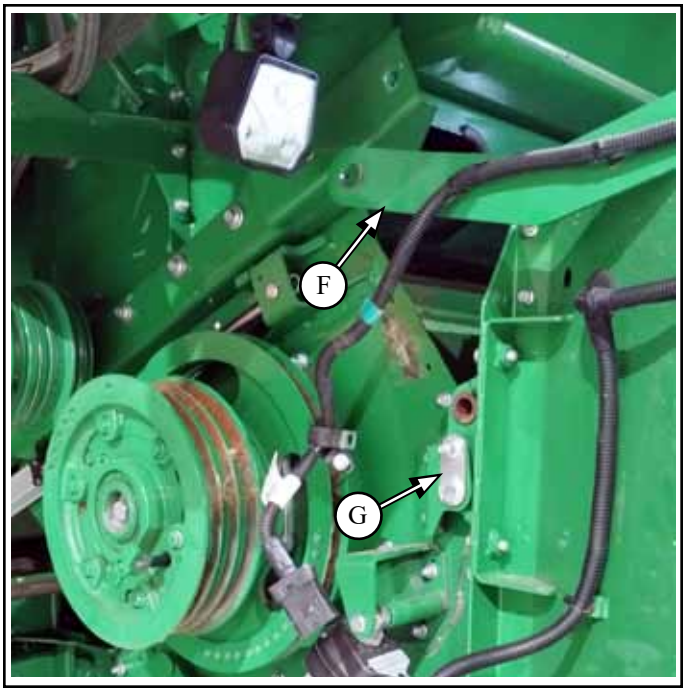
1.5.7 Disconnect tailboard link (**F**) top mounting hardware (**F1**)
- not to be reused



1.5.7.1 Repeat for right side

1.5.8 Remove pivot pin (**G**) securing tailboard in place - not to be reused

1.5.8.1 Repeat for right side

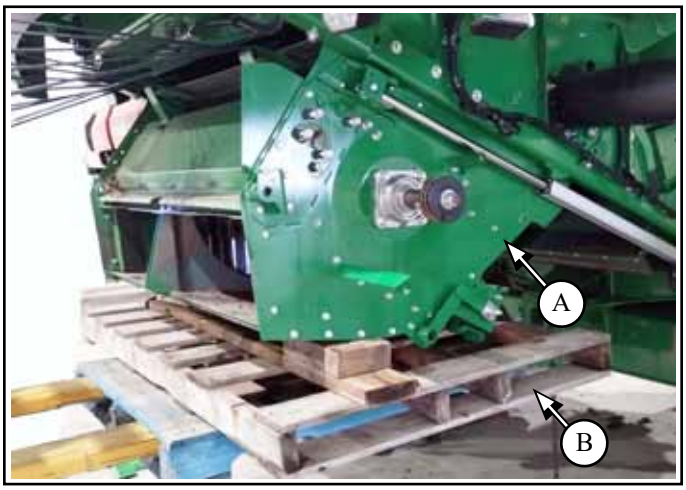


1.5.9 Move tailboard assembly (**H**) out of the way

1.6 OEM Chopper Removal

1.6.1 Support chopper (**A**) with pallet (**B**) to create slack in actuator pins

Note: Be cautious of knifebar actuator and mechanism when raising pallet to chopper

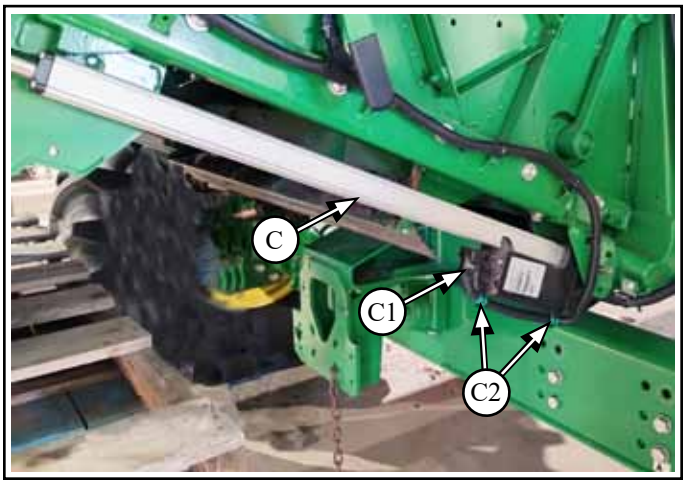


1.6.2 Disconnect harness (**C1**) from chopper actuator (**C**)

1.6.2.1 Disconnect harness zip ties (**C2**) from chopper actuator (**C**)

1.6.2.2 Ensure harness is separated from actuator

1.6.2.3 Repeat for left side

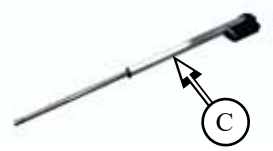


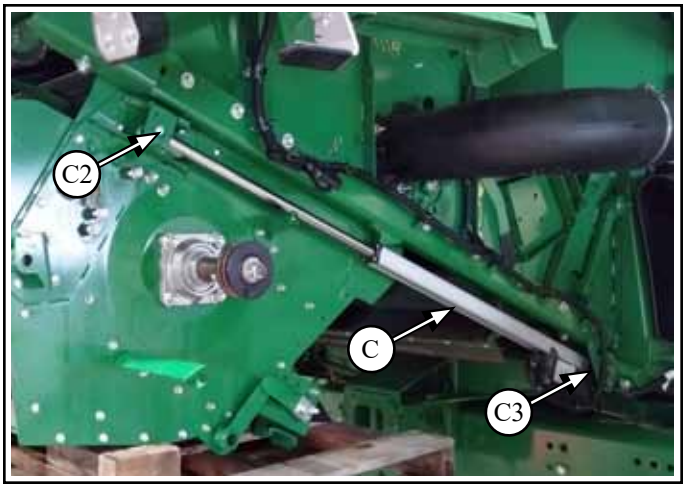
1.6.3 Remove chopper actuator (**C**) from rail and chopper
- to be reinstalled

1.6.3.1 Remove top pin, washer and hairpin (**C2**)
- not to be reused

1.6.3.2 Remove base mount hardware - pin, spacers and hairpin (**C3**)
- to be reinstalled

1.6.3.3 Repeat for left side



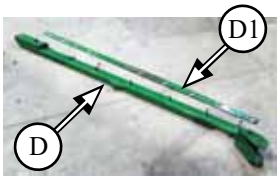


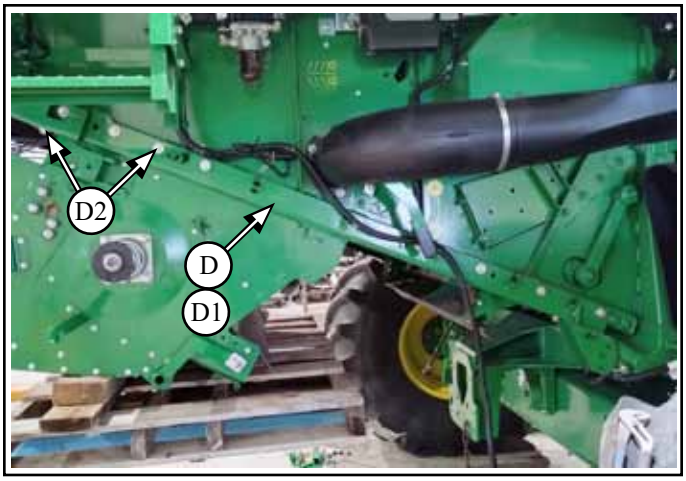
1.6.4 Remove right side rail (**D**) and spacer plate (**D1**)
- side rail mount hardware (**D2**) x11 to be reused
- side rail (**D**) to be reinstalled

- if an SCU is being installed, the OEM side rails will not be reused

- spacer plate (**D1**) to be reinstalled

1.6.4.1 Repeat for left side





1.6.5 Lower chopper (**A**) and set to the side to be modified
- not to be reused

1.7 OEM Chopper Drive Modification
Required for S7 FC Combines which have 3-Rib Chopper Jackshaft Belt

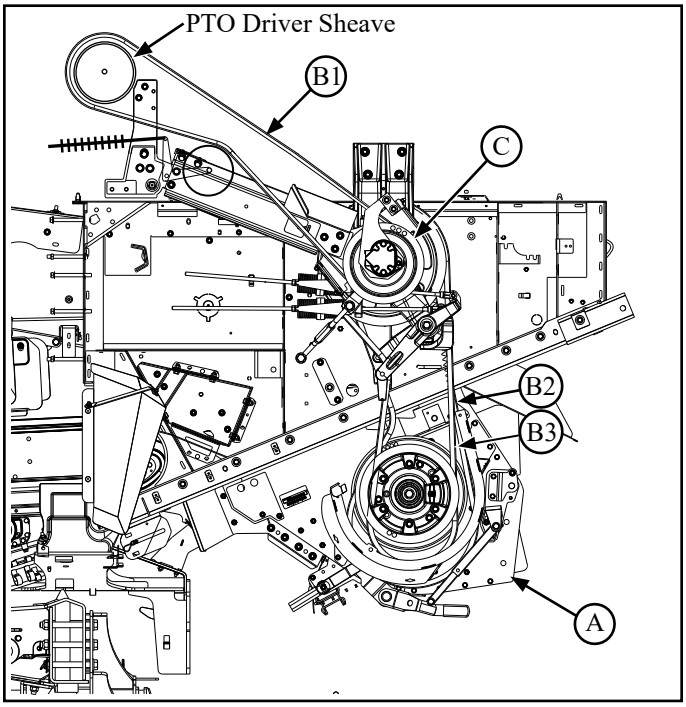
Section 1.7 is NOT REQUIRED FOR XFC Choppers (100 blades)

Belt "B1" and Sheave "C" replacement only required if combine is NOT equipped with a 4 rib belt "B1" and 4 rib pulley (S7 FC)

1.7.1 Loosen all belt tensioners
- remove shields, brackets, hoses and other necessary components as required. Refer to the relevant section of the combine Repair Technical Manual.
- to be reinstalled upon completion of the following steps

1.7.2 Remove 3 rib drive belt (**B1**)
- to be replaced with a new 4 rib V belt

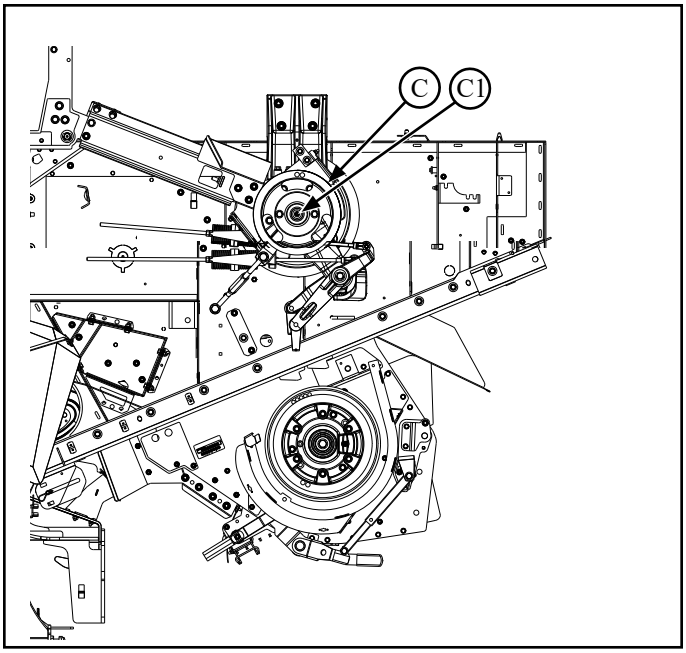
for S7 600 and 700:
- **check PTO driver sheave - ensure 4 grooves, otherwise order 4 groove sheave #RP1764 and 4 rib belt #BE4C127K**
- **installing the 4 groove sheave is done at own risk and may impact factory warranties**



1.7.2.1 Remove inner V belt (**B2**) from chopper (belt against combine wall - low speed)
- to be reused

1.7.2.2 Remove outer V belt (**B3**)
- to be replaced

1.7.3 Remove existing 3 groove upper drive sheave (**C**)
- not to be reused
- refer to the relevant section of the combine Repair Technical Manual for procedure
- will require a gear puller
- hardware (**C1**) to be reused



1.7.4 Upper combine drive installation

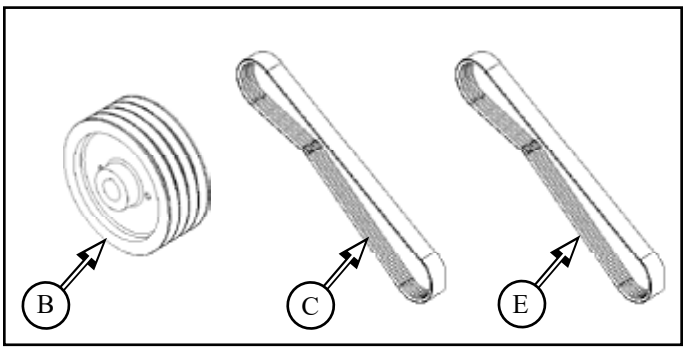
Parts List:
Required for S7 600 and 700 FC Combines:

RP967	Sheave 4 groove HC **(B)**	Qty 1
BE4C127K	V Belt 4C 127L (**C**)	Qty 1

- belt BE4C127K is not included in MAV package, order as required as noted in 1.7.2

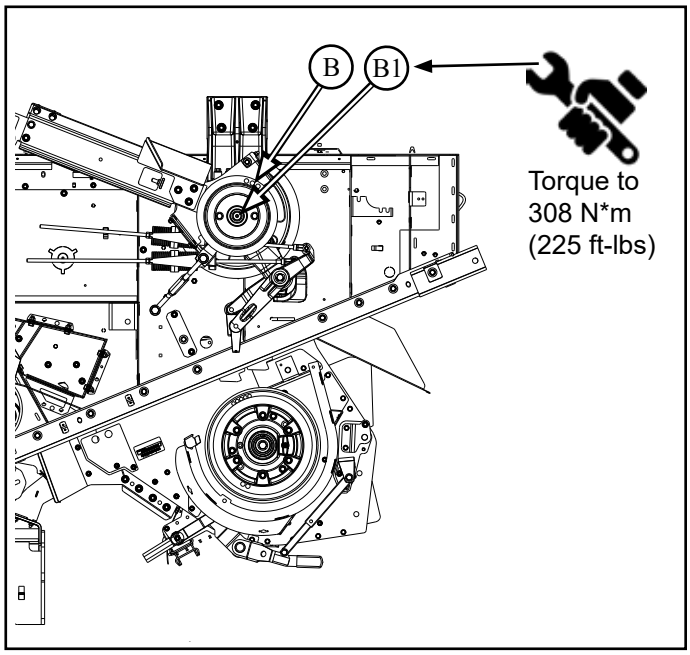
Required for S7 800 and 900 FC Combines:

RP967	Sheave 4 groove HC **(B)**	Qty 1
BE4C128K	V Belt 4C 128L (**E**)	Qty 1



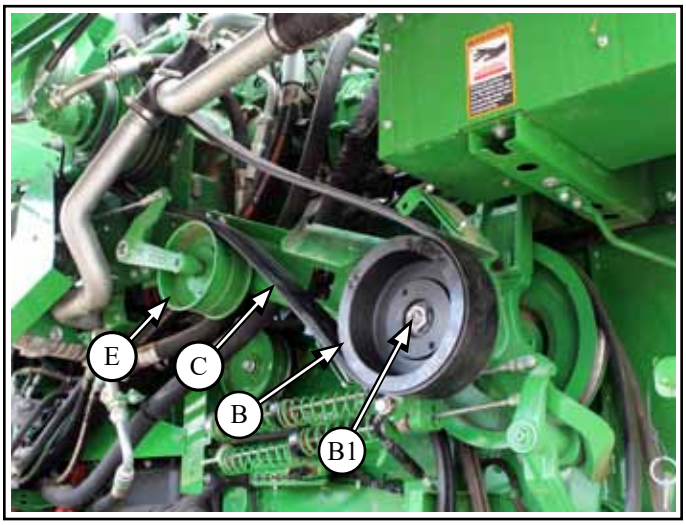
1.7.4.1 Install new 4 groove upper drive sheave (**B**) onto combine jackshaft with:
- reuse mounting hardware (**B1**)

Torque Nut to 308 N-m (225 lb-ft)



1.7.4.2 for S7 600 and 700 FC Combines:
Install new 4 rib upper drive V belt (**C**) onto combine drive sheave and new 4 groove sheave (**B**)
- tighten tensioner (**E**) to indicated length
- reinstall upper shields, brackets and components
- reinstall pump if equipped with one
- reinstall shielding

1.7.4.3 for S7 800 and 900 FC Combines:
Install new 4 rib upper drive V belt (**E**) onto combine drive sheave and new 4 groove sheave (**B**)
- tighten tensioner (**C**) to indicated length
- reinstall upper shields, brackets and components
- reinstall pump if equipped with one
- reinstall shielding



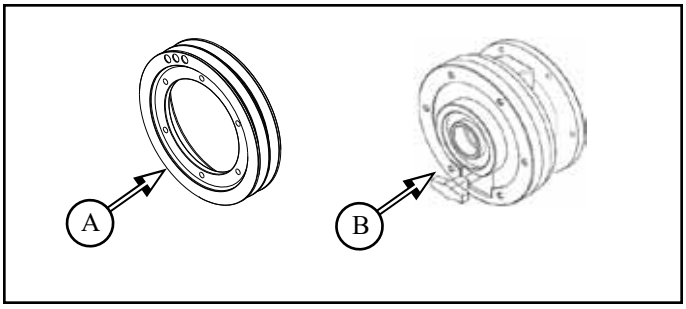
2 S7 Series Complete MAV Chopper Installation

2.1 Chopper Drive Installation - On combines with the OEM Fine Cut Chopper (FC)

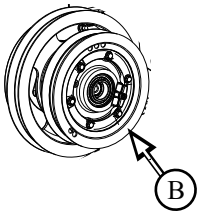
For combines with the OEM Extra Fine Cut Chopper (XFC), no drive update is required. Skip section 2.1

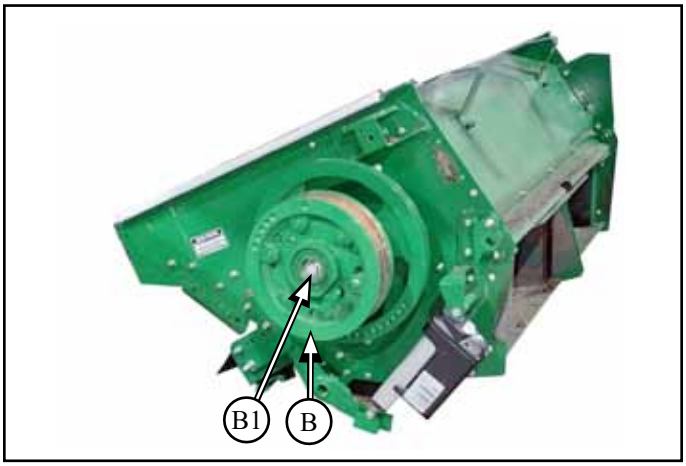
Parts List:

RP968	Sheave 2HC HS Chopper Drive (**A**)	Qty 1
	OEM Deere Shifter (**B**)	Qty 1



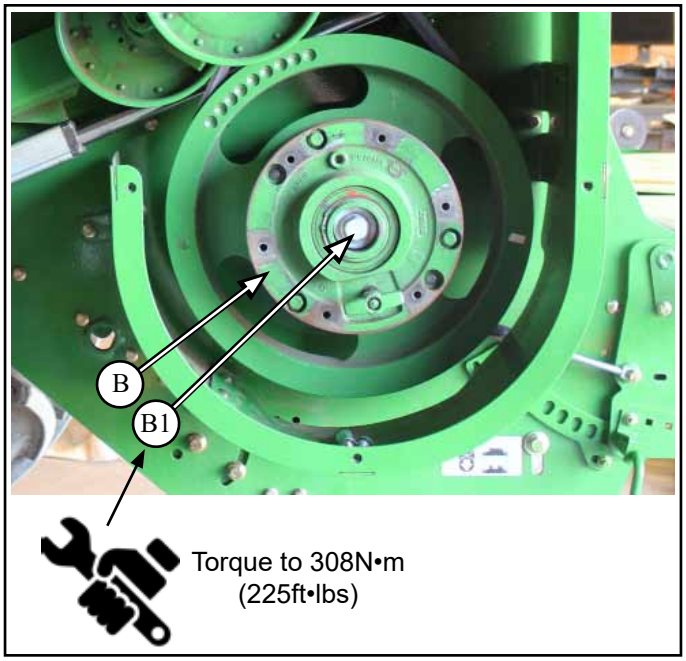
2.1.1 Remove the Deere speed shifter assembly (**B**) from OEM chopper drive shaft
- if XFC, to be reinstalled on new chopper as is
- if FC, to be modified and reinstalled on new chopper
- mounting hardware, bolt and washer (**B1**) to be reused





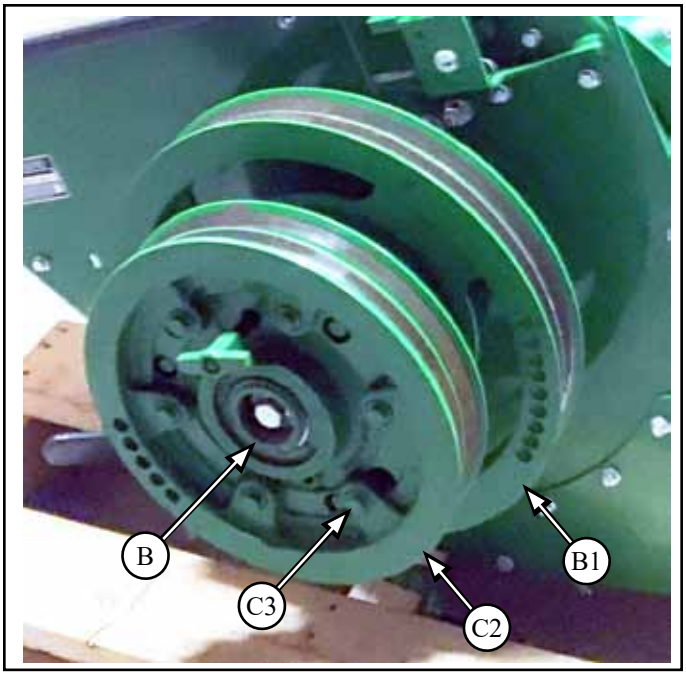
2.1.2 Install OEM Deere shifter (**B**) onto new chopper drive shaft, with:
- reuse mounting hardware (**B1**)

Torque Bolt (**F1**) to 308 N-m (225 ft-lb)



2.1.3 For FC OEM, remove Deere outside sheave (**C2**) from OEM Deere shifter (**B**), larger inner sheave (**B1**) to remain
- mounting hardware (**C3**) x6, to be reused
- sheave (**C2**) not to be reused

2.1.3.1 For XFC OEM, leave shifter assembly (**B**) as is, do not remove outside sheave (**C2**)



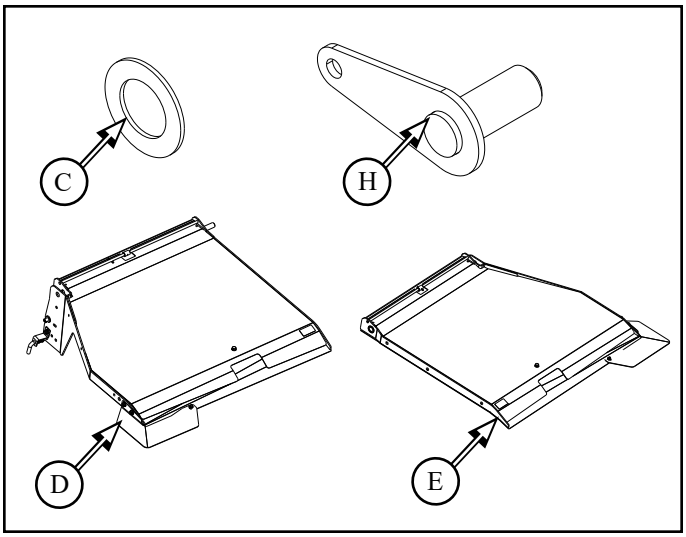
2.1.4 For FC OEM, install new RP968 sheave (**A**) to outside of Deere shifter (**B**), with:
- reuse mounting hardware (**C3**) x6

2.2 Tailboard Installation

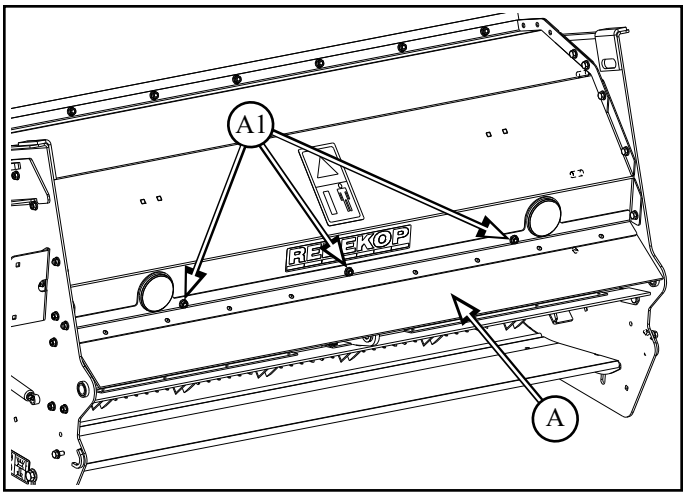
If short forks only available on the forklift for lifting, the tailboards may need to be installed after the choppper housing installation

Parts List:

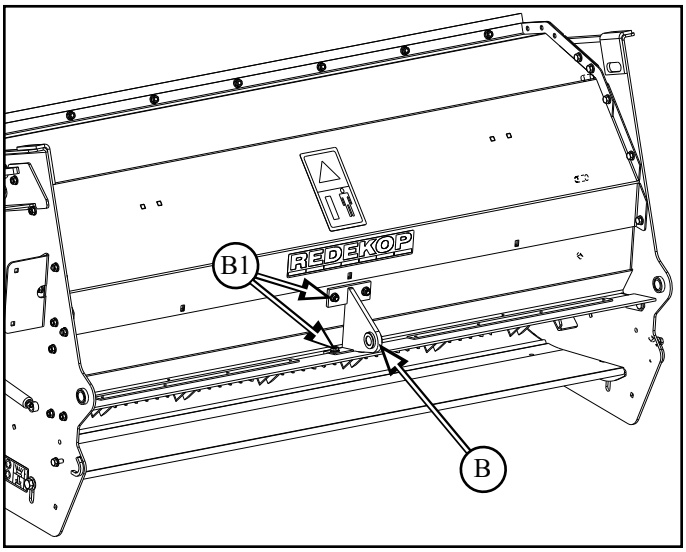
RP108	Machine Bushing .76 id x 1.25 od (**C**)	Qty 2
	- located in tailboard fin box hardware bag	
CC212Z	Pin Tailboard Pivot (**H**)	Qty 2
	Tailboard Lt (**D**)	Qty 1
	Tailboard Rt (**E**)	Qty 1



2.2.1 Remove top tailboard seal assembly (**A**) from rear of chopper
- seal assembly (**A**) and mount hardware (**A1**) to be reinstalled



2.2.2 Remove tailboard center mount bracket (**B**) from rear of chopper
- bracket (**B**) and mount hardware (**B1**) to be reinstalled

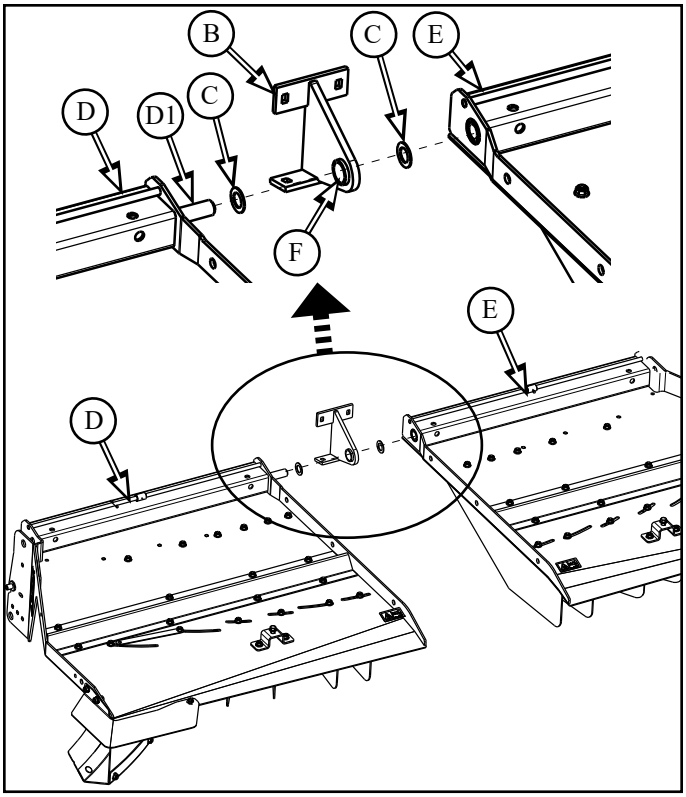


2.2.3 Slide machine bushing (**C**) onto left tailboard pin (**D1**)
- located in tailboard fin box hardware bag

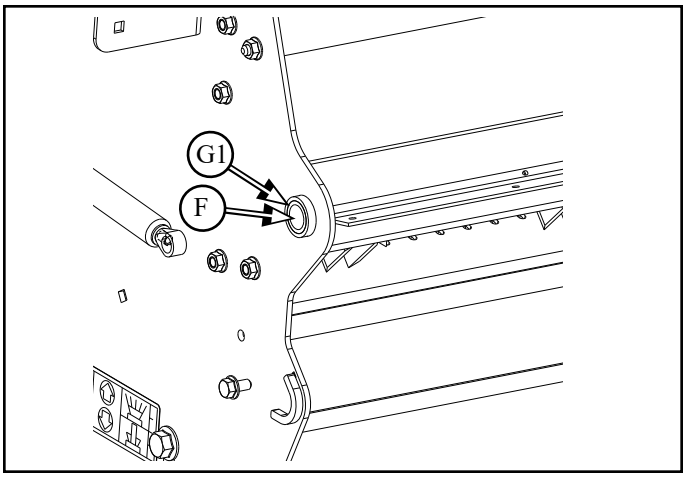
2.2.4 Slide tailboard mount bracket (**B**) onto tailboard pin (**D1**)
- ensure nylon bushing (**F**) is in hole of bracket (**B**)

2.2.5 Slide machine bushing (**C**) onto tailboard pin (**D1**)

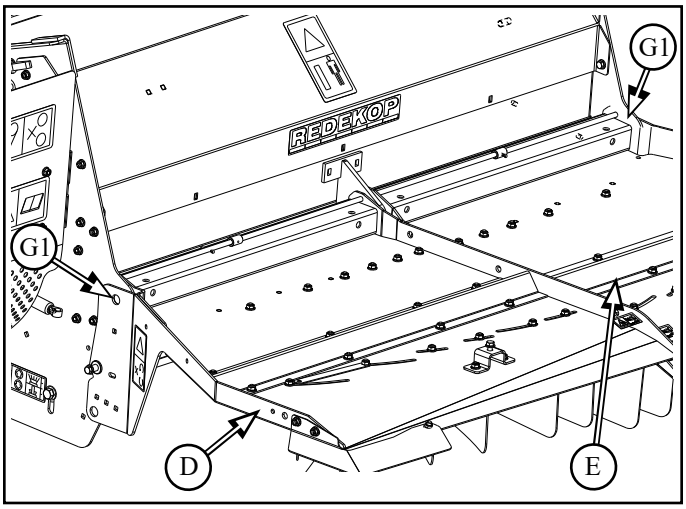
2.2.6 Slide right tailboard (**E**) onto tailboard pin (**D1**)



2.2.7 Ensure nylon bushing (**F**) is in chopper tailboard mount hole (**G1**), both sides

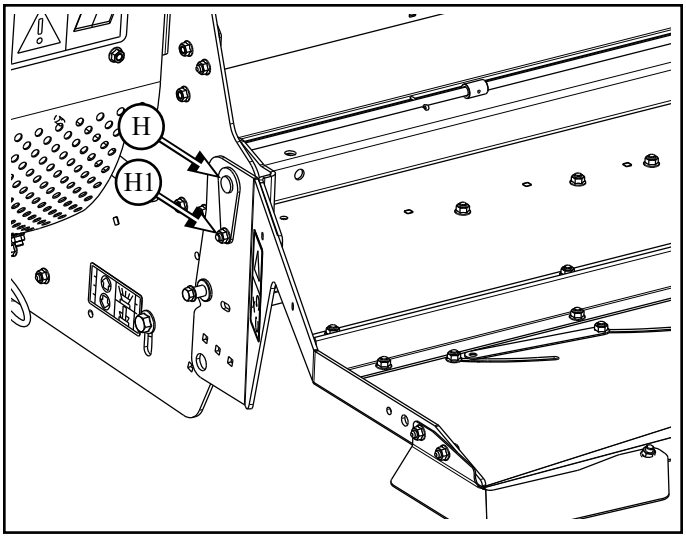


2.2.8 Lift tailboards (**D** & **E**) up into place on chopper
- align side holes of tailboard with mount holes (**G1**) on side wall of chopper

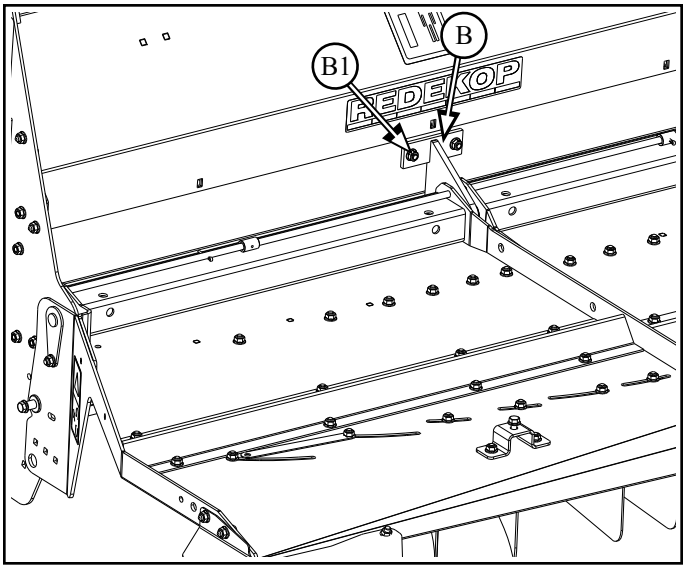


2.2.8.1 Secure tailboards into place, with
- pivot pin (**H**)
- both sides

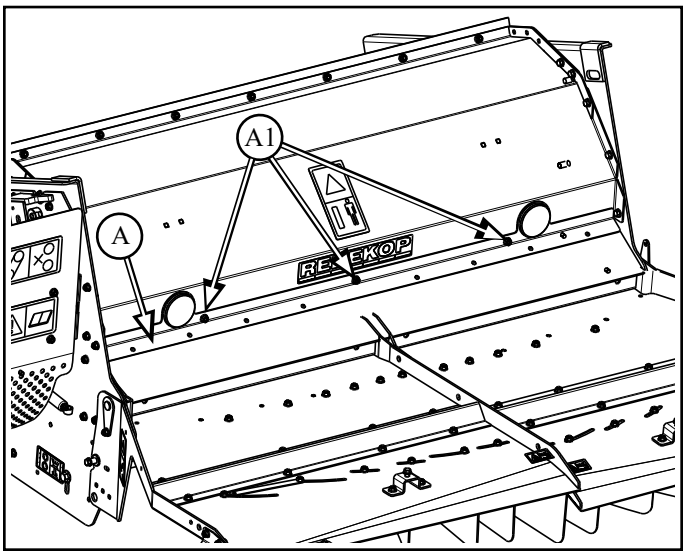
2.2.8.2 Secure pivot pin (**H**) in place, with:
- M8 x 20 round head bolt and flange nut (**H1**)
  - located in hardware bag with tailboard fins
- ensure head of bolt is on inside of tailboard
- repeat for other side



2.2.9 Fasten center tailboard mount bracket (**B**) to rear of chopper, with:
- reuse mount hardware (**B1**) x4



2.2.10 Reinstall top tailboard seal assembly (**A**) to chopper, with:
- reuse mount hardware (**A1**) x3

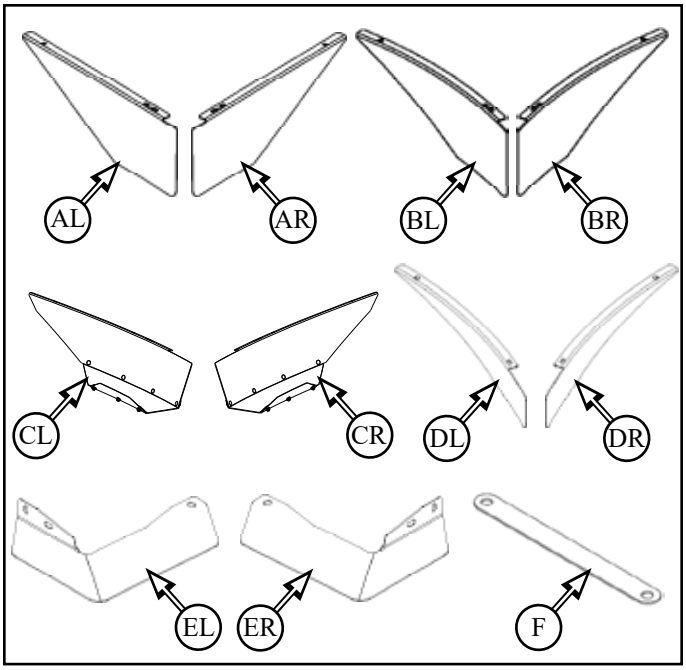


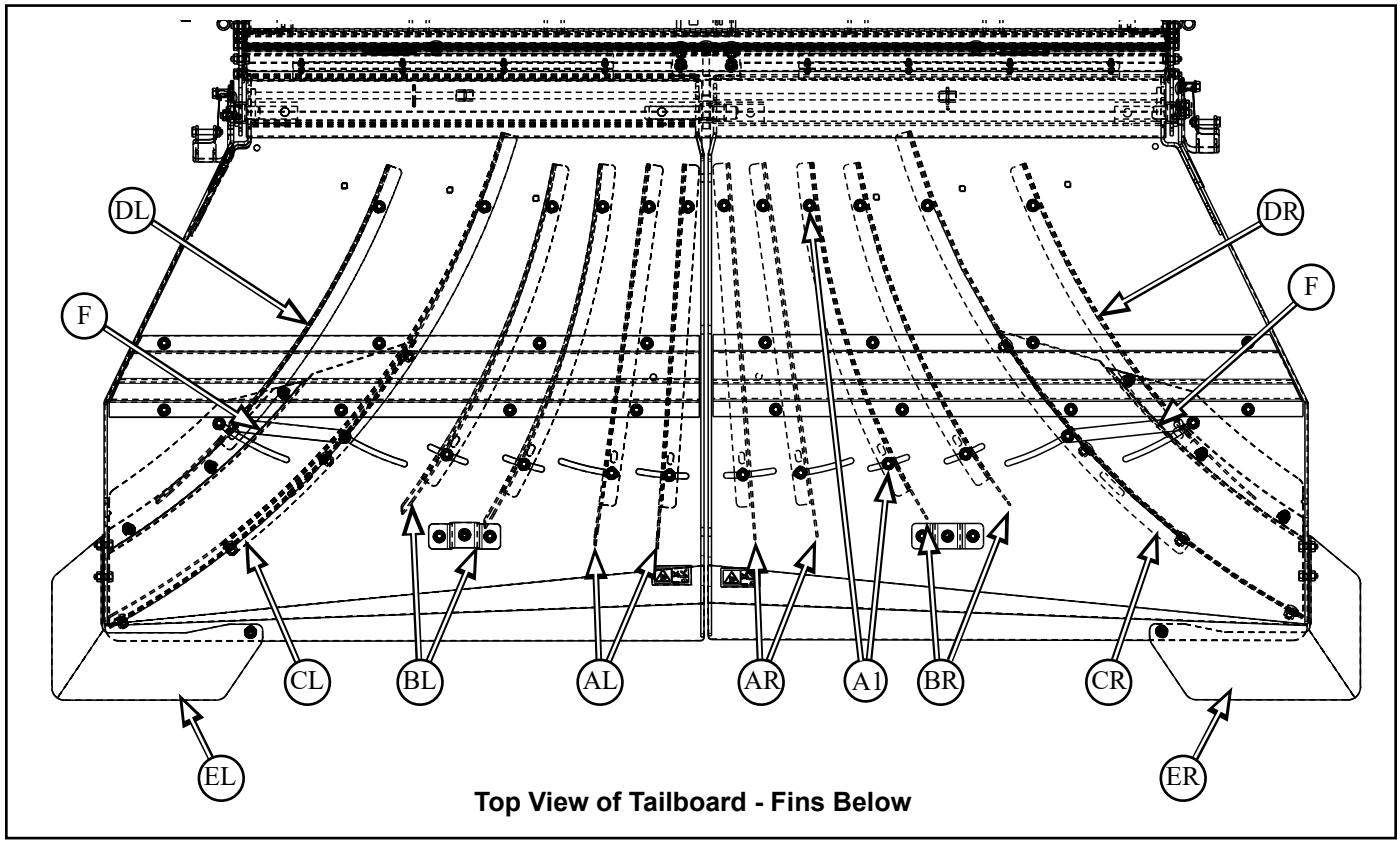
2.3 Tailboard Fin Installation

If Extra Wide Spread Kit is being installed, follow those instructions

Parts List:

CG116GL	Fin Straight 22L Lt (**AL**)	Qty 2
CG116GR	Fin Straight 22L Rt (**AR**)	Qty 2
CG120GL	Fin Curve 22L Lt (**BL**)	Qty 2
CG120GR	Fin Curve 22L Rt (**BR**)	Qty 2
CG237GAL	Fin Scooped Assy Lt (**CL**)	Qty 1
CG237GAR	Fin Scooped Assy Rt (**CL**)	Qty 1
CG761GL	Fin Curve 19L Lt (**DL**)	Qty 1
CG761GR	Fin Curve 19L Rt (**DR**)	Qty 1
CG478GL	Corner Extension Lt (**EL**)	Qty 1
CG478GR	Corner Extension Rt (**ER**)	Qty 1
CG733G	Connecting Link (**F**)	Qty 2





Top View of Tailboard - Fins Below

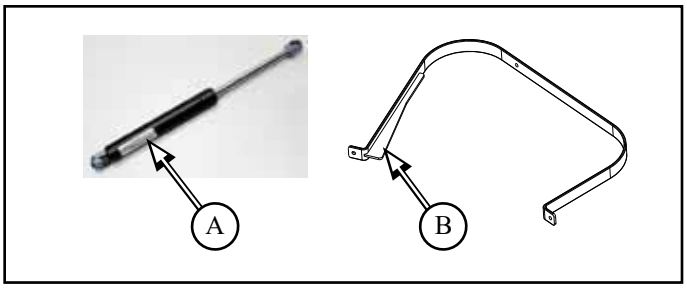
2.3.1 Install tailboard fins to underside of tailboards as shown, with:
- M8 x 16 round head bolt and flange nut (**A1**) x2 per fin
- ensure head of bolt is on bottom pointing up

2.3.2 Install connector link (**F**) to scooped fin and small curved fin (**D**) on top of tailboard
- both sides

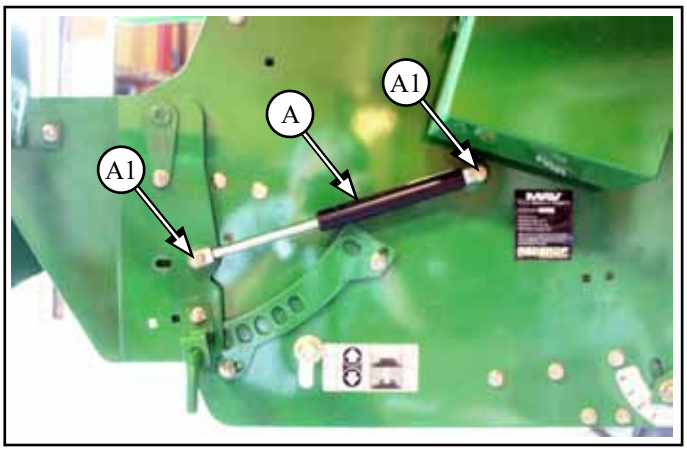
2.4 Gas Spring and Tailboard Guard Installation

Parts List:

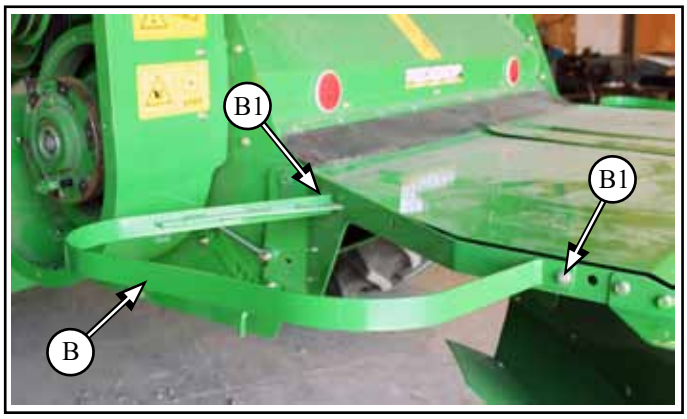
RP951A	Gas spring (**A**)	Qty 2
CS171G	Tailboard guard (**B**)	Qty 2



2.4.1 Install gas spring (**A**) onto side of chopper housing and tailboard studs with:
- M8 x 16 flange bolt (**A1**) x2
  - located in CD680S hardware bag
- both sides



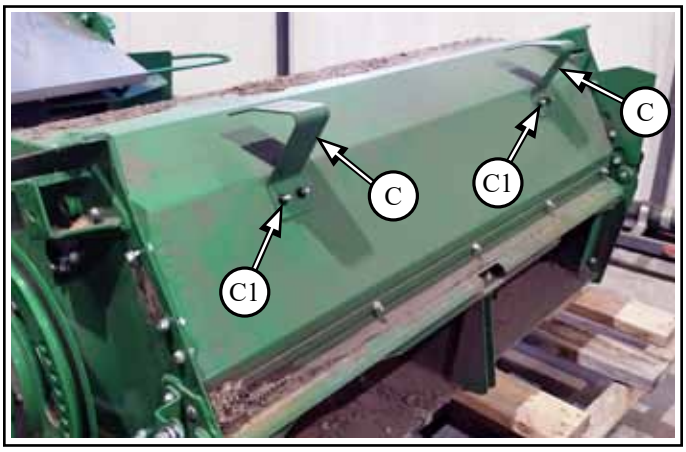
2.4.2 Install tailboard guard (**B**) onto side of tailboard with:
- M8 x 20 flange bolts and flange nut (**B1**) x2
  - located in CD680S hardware bag
- ensure head of bolt is on inside of tailboard
- both sides



2.5 Upper Door Windrow Deflector Bracket Installation

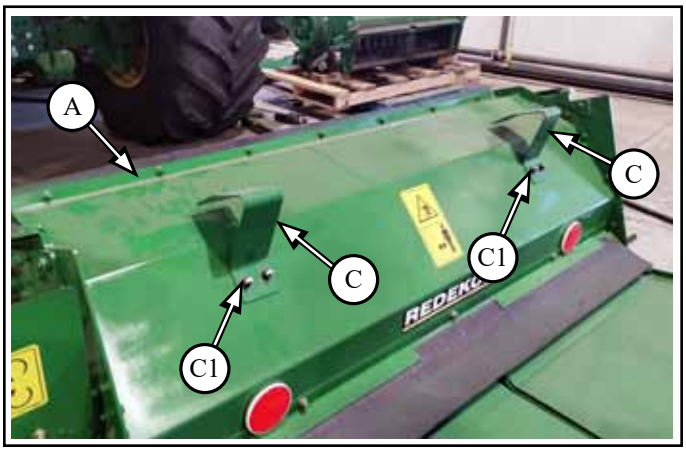
Only applicable for machines with the upper door that opens for windrow (Chop to Drop)

2.5.1 Remove bracket (**C**) x2 from OEM chopper
- to be reinstalled on new chopper
- mounting hardware (**C1**) x4 to be reused



2.5.1.1 Knock out tab (**C2**) x4 from new chopper (**A**)

2.5.1.2 Install bracket (**C**) x2 removed from OEM chopper to holes (**C2**) in new chopper (**A**), with:
- reuse mounting hardware (**C1**) x4



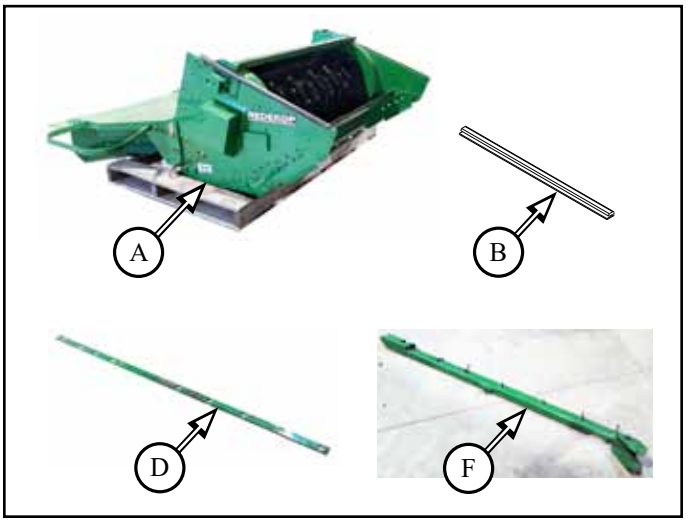
2.6 S7 Series MAV Chopper Housing Installation

Parts List:

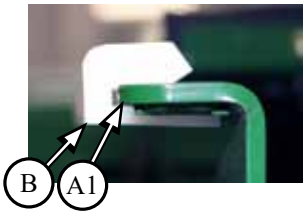
CD1510GA	S7 Series MAV Chopper Housing (**A**)	Qty 1
CD636-01	Slider JD S Series (**B**)	Qty 2
	OEM Spacer Plate (**D**)	Qty 2
	OEM Side Rail - Left & Right (**F**)	Qty 2

If installing a SCU, Redekop supplied rails will be required to be installed. New rails are provided with the SCU package.

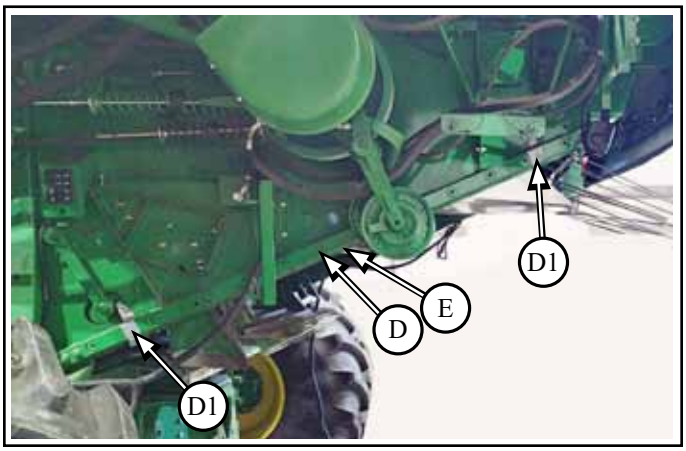
If short forks only available on the forklift for lifting, the tailboards may need to be installed after for the housing installation



2.6.1 Install plastic slider (**B**) onto chopper lip (**A1**)
- both sides
- thicker portion to be on top of lip (**A1**)

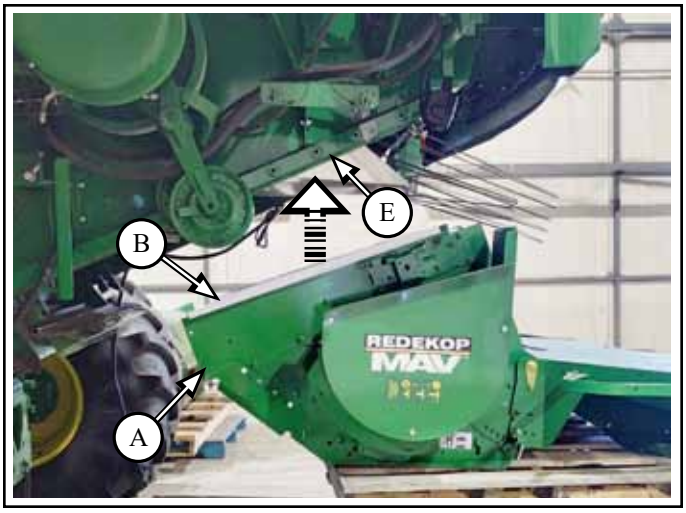


2.6.2 Tape (**D1**) OEM spacer plate (**D**) to side of combine channel (**E**)
- both sides



2.6.3 Lift chopper (**A**) up to bottom side of combine channel (**E**)

2.6.3.1 Raise chopper until the sliders (**B**) are flush with underside of combine channel (**E**) - both sides



2.6.3.2 View with chopper (**A**) raised to bottom side of combine channel (**E**)

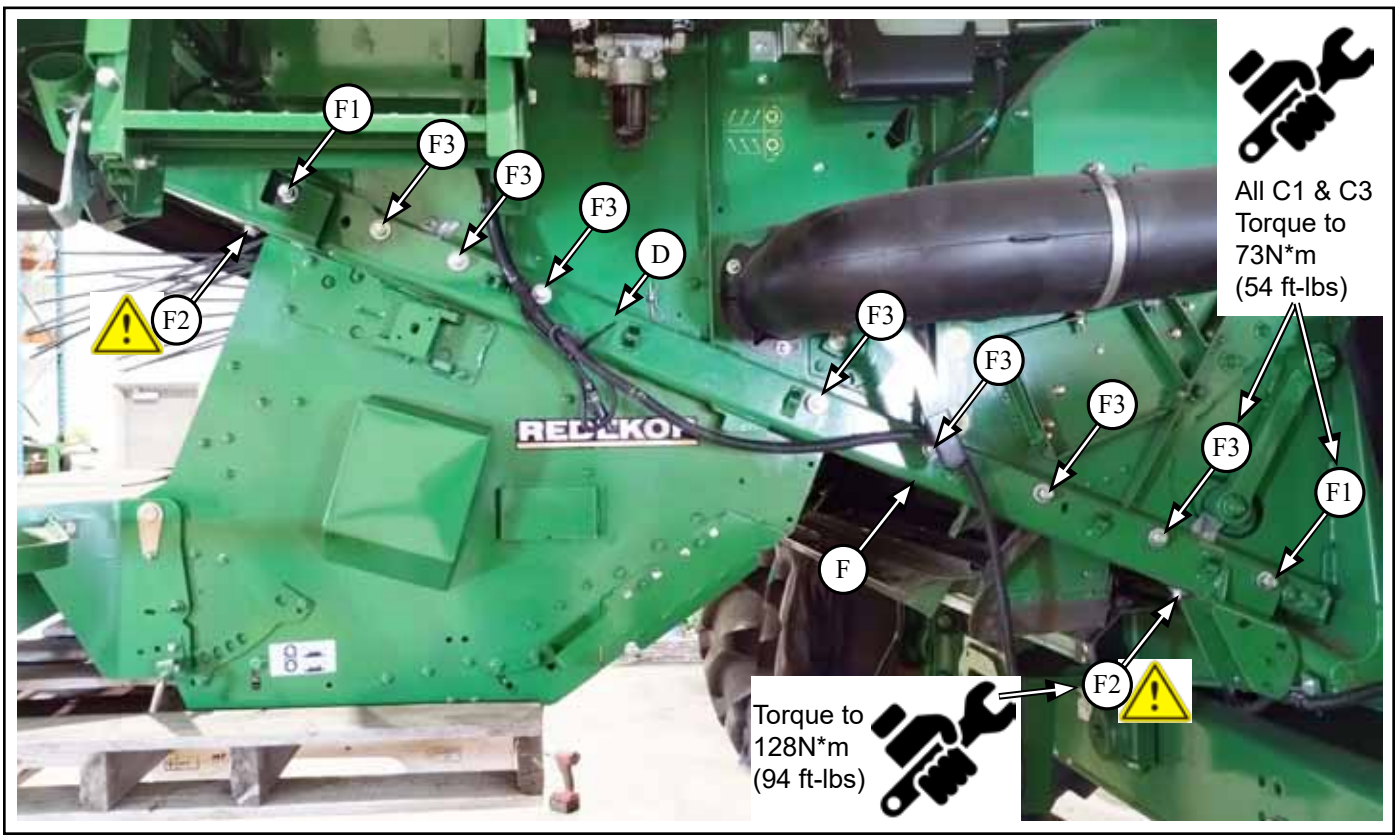
2.6.7 Install chopper mount side rails (**F**) under the plastic guide (**B**) and combine channel. Ensure the spacer plate (**E**) is between side rail and combine channel.

Important to install side rail hardware as directed below
- bolts C2 can be slightly threaded in prior to installing rail

Fasten with existing flatwashers and bolt hardware in the following order:

- M12 x 25 flange bolt (**F1**) hand tighten
- M12 x 30 flange bolt (**F2**) tighten to specification (128N*m / 94ft-lb) - ensure rail is pulled tight against frame
- M12 x 25 flange bolt (**F3**) hand tighten
- Verify that the chopper rail is flush to the side sheet
  - if spacer plate has fallen out of position it can create a gap which has to be corrected
- Tighten all hardware to specificaton (73N*m / 54ft-lb)

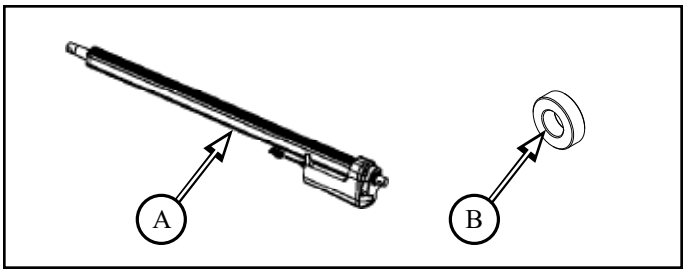
Repeat for left side



2.7 Actuator installation

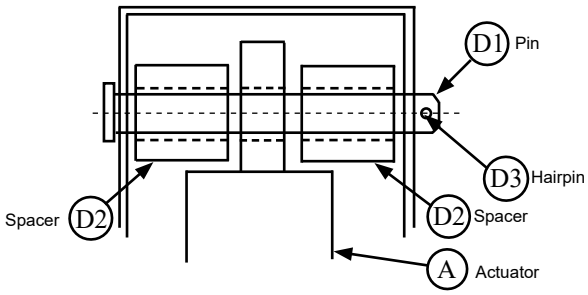
Parts List:

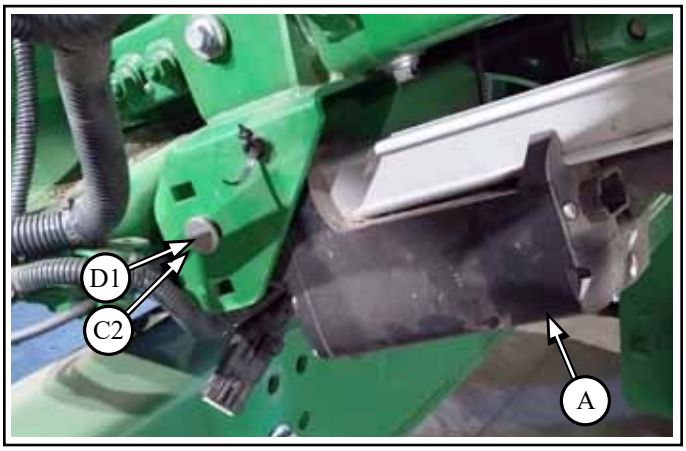
	OEM Actuator (**A**)	Qty 2
CD664Z	Spacer .5 IDx1.0 ODx.313 L **(B)**	Qty 2
CD1510S	Hardware Bag	



2.7.1 Slide head OEM actuator (**A**) to chopper housing (**C1**) (if actuator is fully extended)

2.7.2 Attach bottom of linear actuator (**A**) to middle hole of slide rail bracket (**C2**), with:
- reuse existing pin (**D1**), spacer (**D2**) x2 & hairpin (**D3**)

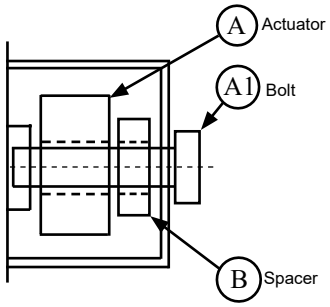


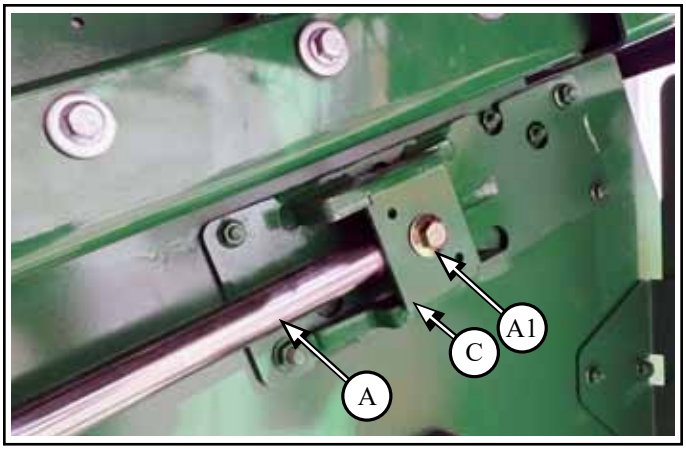


2.7.2.1 Repeat for other side

2.7.3 Attach head of linear actuator (**A**) to chopper housing (**C**), with:
- M12 x 60 flange head bolt (**A1**) & spacer (**B**)

2.7.3.1 Repeat for other side

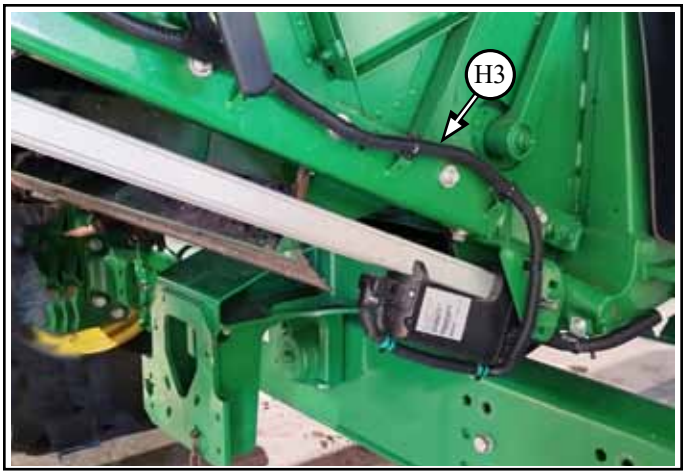




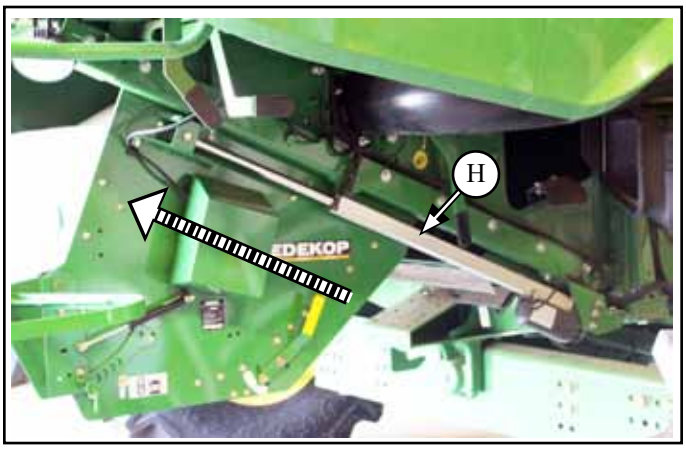
2.7.4 Connect actuator harness (**H3**) to main harness

Route and attach harness to ensure wire will not be pinched

- both sides



2.7.5 Synchronize up the actuators (**H**) by fully extending the actuators (**H**) to run the chopper all the way up/rearward
- do not move chopper forward before synching up actuators
- ensure inside of rails are clear of chaff and debris

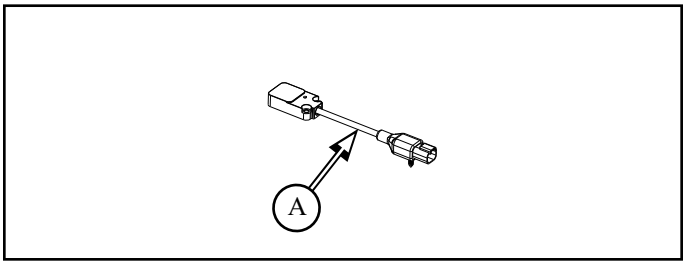


2.7.6 Lower supporting pallet (**F**)

2.8 Speed Sensor Installation

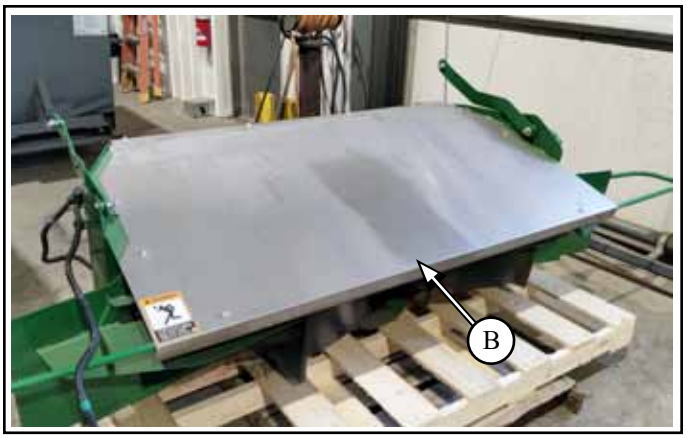
Parts List:

OEM Speed Sensor (**M**) Qty 1

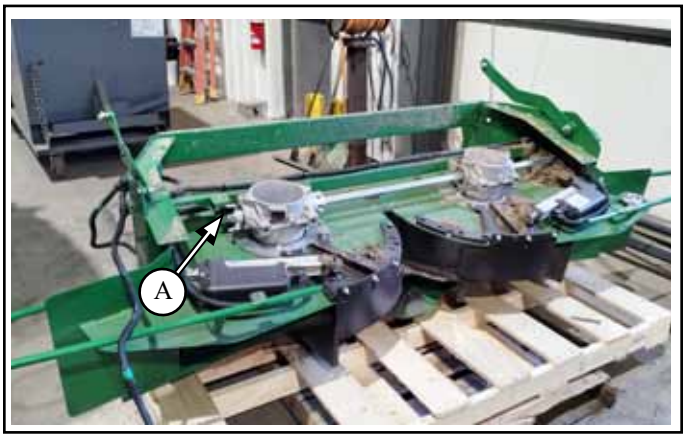


2.8.1 Procedure to remove OEM Speed Sensor on OEM Combine with Advanced Power Cast Tailboard

2.8.1.1 Remove the top OEM tailboard panel (**B**) to access the speed sensor

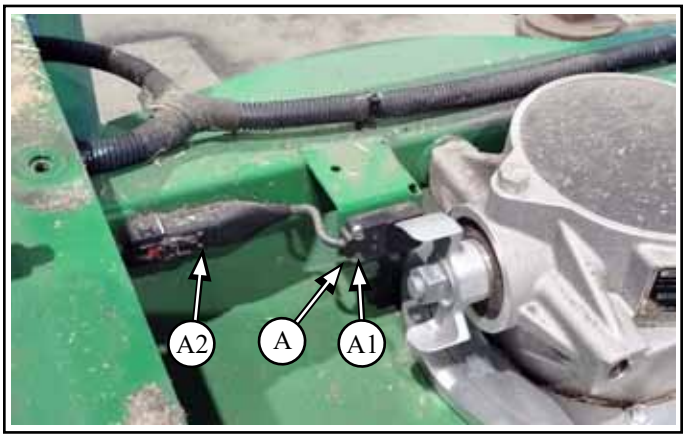


2.8.1.2 Location of OEM speed sensor (**A**) to be removed



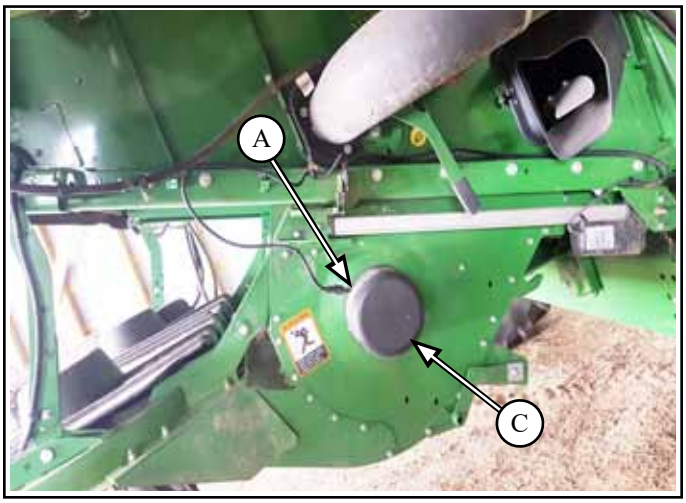
2.8.1.3 Remove OEM speed sensor (**A**)
- mounting hardware (**A1**) to be reused
- to be reinstalled on new MAV straw chopper

2.8.1.3.1 Disconnect OEM speed sensor (**A**) from OEM harness connection (**A2**)

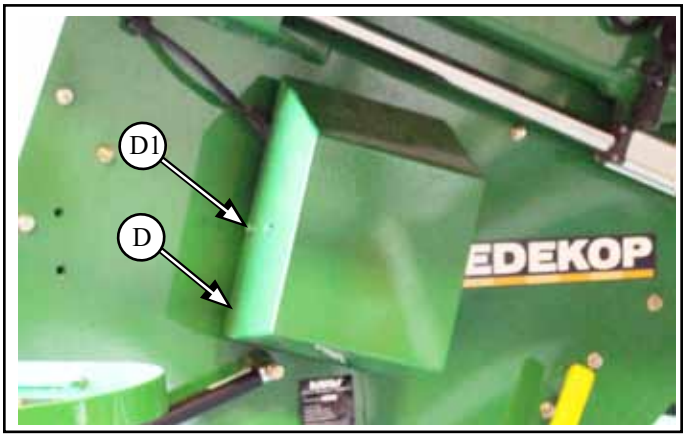


2.8.2 Procedure to remove OEM Speed Sensor on OEM Combine with Hydraulic Spinners or Vane Tailboard

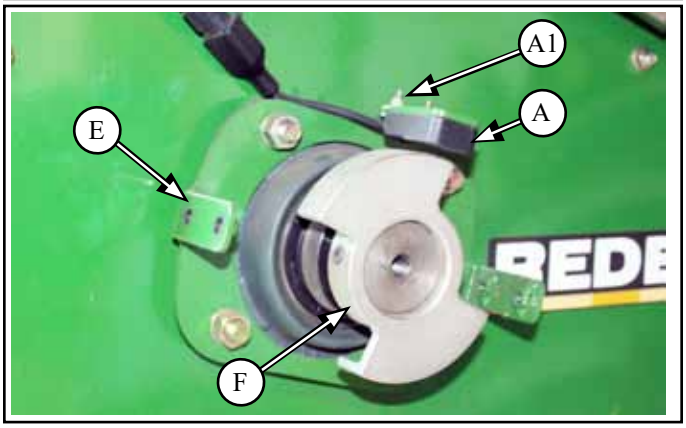
2.8.2.1 Remove the John Deere chopper speed sensor (**A**) from under cover (**C**)
- to be reinstalled on new MAV straw chopper



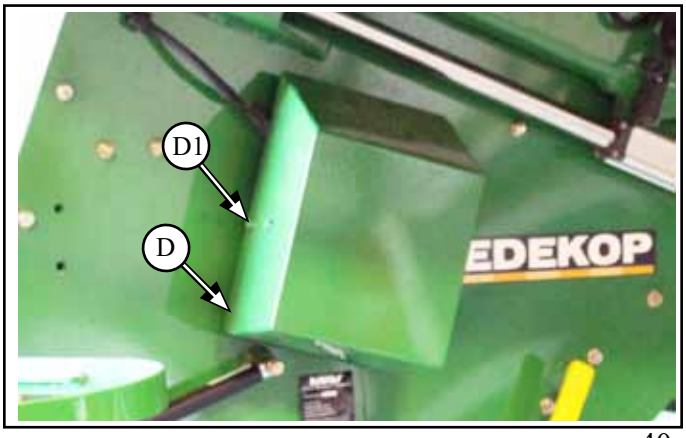
2.8.3 Remove sensor shield (**D**) on right side of chopper housing from shield mounting bracket (**E**)
- shield and mounting hardware (**D1**) to be reinstalled



2.8.4 Install speed sensor (**A**) over the speed sensor target (**F**), with:
- reuse mounting hardware (**A1**) x2

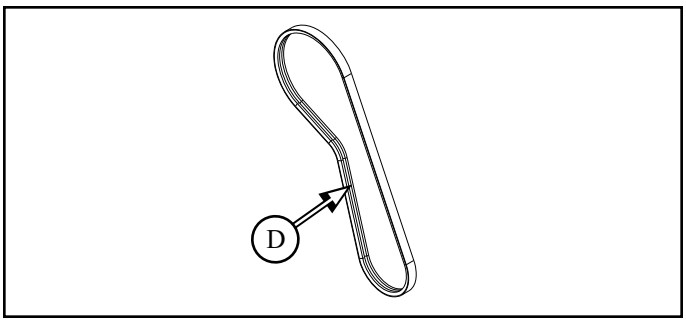


2.8.5 Reinstall sensor shield (**D**) to shield mounting bracket (**E**), with:
- reuse mounting hardware (**D1**) x4



2.9 Drive Belt Installation

Parts List:
BE2C112K V Belt 2C 112L Kevlar (**D**) Qty 1

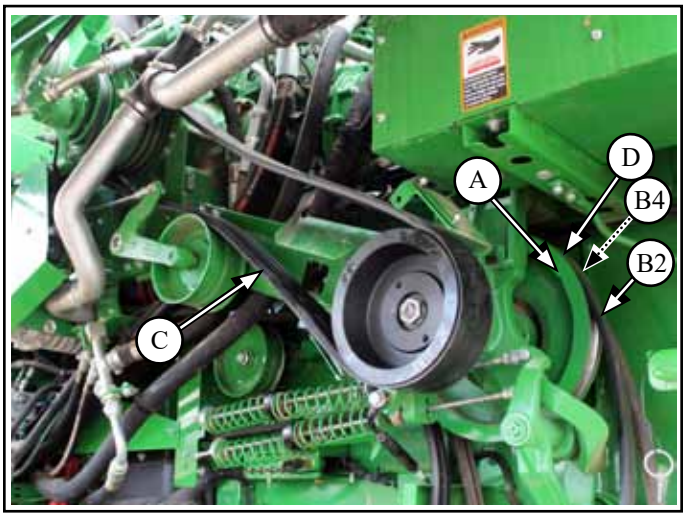


2.9.1 Drive Belt Installation onto Jackshaft

All belts must be placed on Jackshaft before installing to chopper sheaves

Install V belts onto inner side of chopper jackshaft sheave (**A**) in the following order:

1 - New chopper drive 2 groove V belt (**D**) onto large set of grooves on jackshaft sheave (**A**)
2 - Beater drive V belt (**B4**) onto middle set of grooves on jackshaft sheave (**A**) up to the beater sheave
- reattach V belt to front combine sheave
- tighten spring tensioner to indicated length
3 - Original low speed chopper drive belt (**B2**) closest to the side wall will be reinstalled



2.9.2 Drive Belt Installation onto Chopper

All belts must be placed on Jackshaft before installing to chopper sheaves

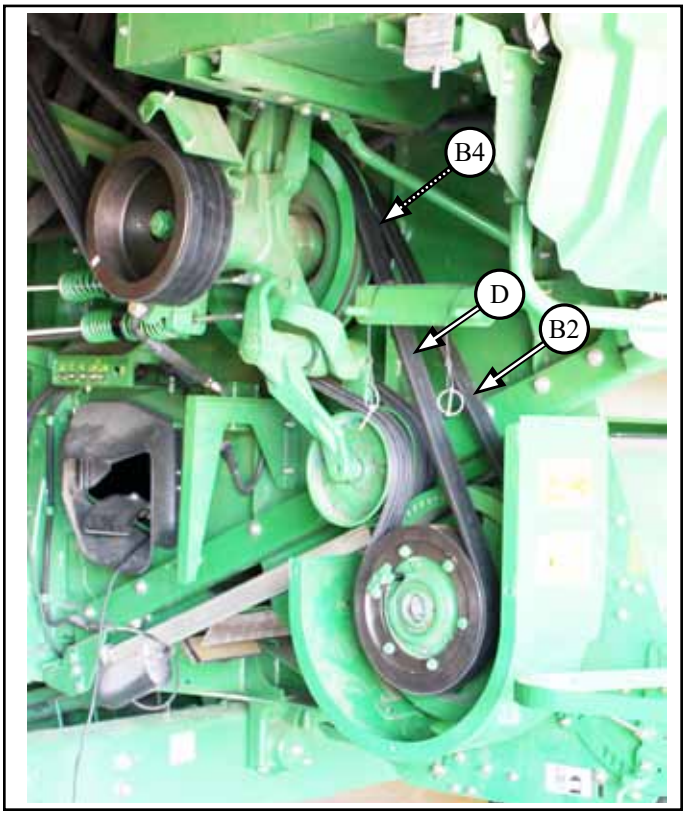
1st - BE2C112K (**D**) onto large Jackshaft sheave
2nd - Beater Belt (**B4**) onto middle sheave
3rd - Existing low speed belt (**B2**) on sheave closest to wall

2.9.2.1 Reinstall existing low speed drive belt (**B2**) onto large drive sheave on chopper

2.9.2.2 Reinstall beater drive belt (**B4**) from jackshaft up to beater

2.9.2.3 Install new high speed 2 groove BE2C112K V drive belt (**D**) onto small drive sheave on chopper

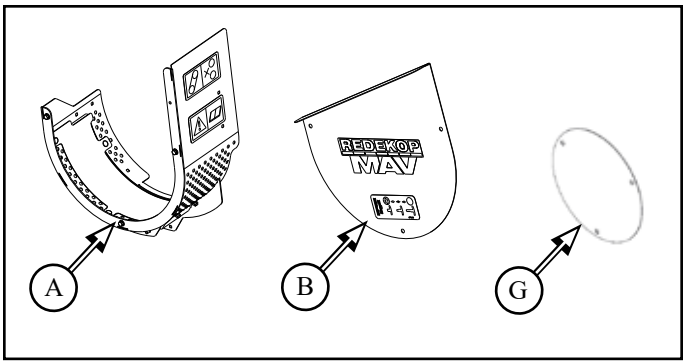
2.9.2.4 Tighten all belt spring tensioners to indicated length



2.10 Shield Installation

Parts List:

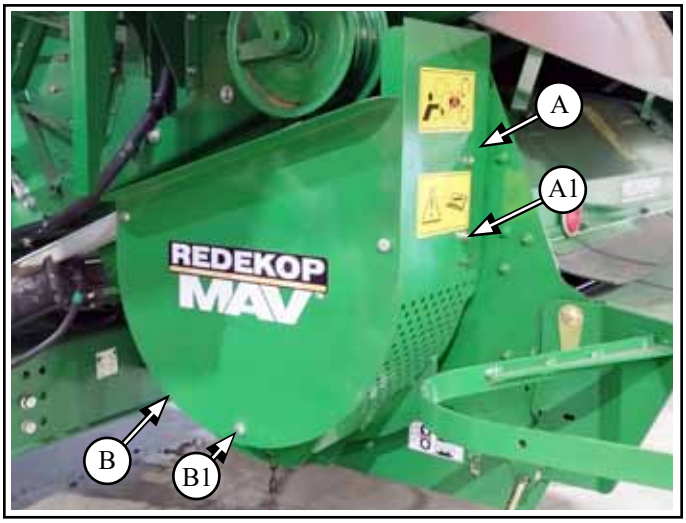
SC1509GA	Bottom shield (**A**)	Qty 1
CD655GA	Bottom shield cover (**B**)	Qty 1
CD672G	Jackshaft shield plate (**G**)	Qty 1



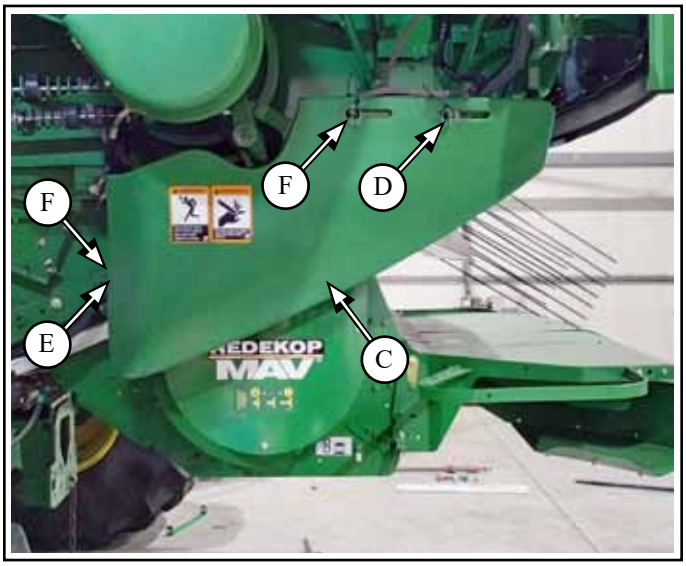
2.10.1 Reinstall bottom shield (**A**) and cover (**B**) if previously removed from chopper, reuse mounting hardware

2.10.1.1 Install bottom shield (**A**) onto mount brackets on side of chopper with:
- M8 x 16 round head bolt and flange nut (**A1**) x6

2.10.1.2 Install bottom shield cover (**B**) onto bottom shield (**M**) with:
- M8 x 16 flange bolt (**B1**) x3

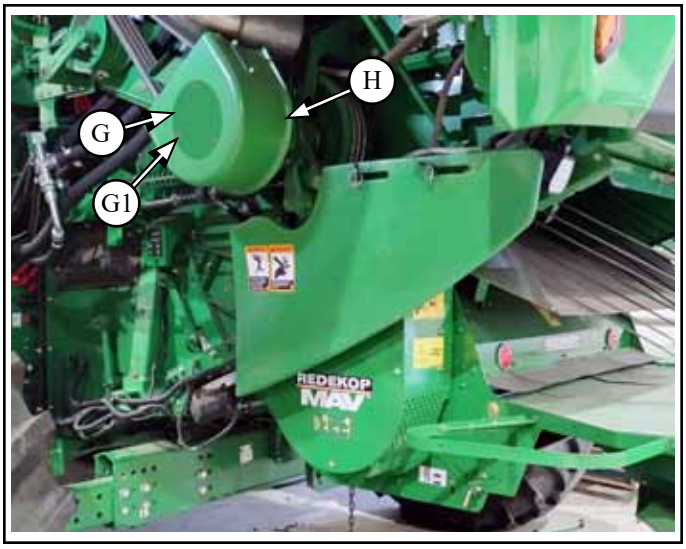


2.10.2 Install upper drive shield (**C**) onto upper and side pins and secure in place with:
- shield strap 12” (**D**)
- shield strap 13.5” (**E**)
- lynch pin (**F**) x4
  - located in CD659S hardware bag



2.10.3 Reinstall jackshaft shield (**H**) over sheave on jackshaft with:
- reuse existing hardware

2.10.4 Install jackshaft shield plate (**G**) if hydraulic pump was removed onto side of jackshaft shield (**H**) with:
- M8 x 20 round head bolt and flange nut (**G1**) x3
  - located in CD672S hardware bag



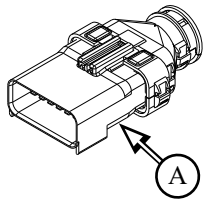
3 Electronics

3.1 Tailboard Harness Loop Plug Installation

To allow actuators to move for chopper installation

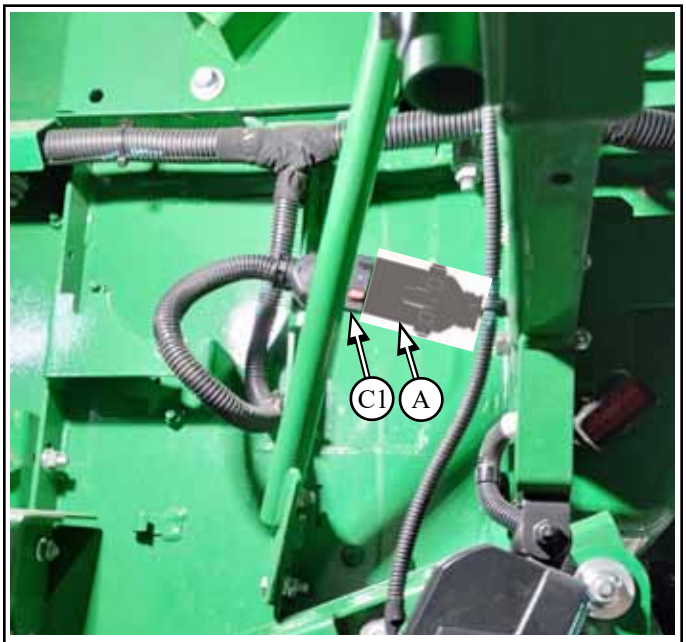
Parts List:

RP1737 Harness Loop S7 Active Tailboard (**A**) Qty 1



3.1.1 Disconnect tailboard spreader controller harness connector (**B1**) from main harness connector (**C1**)

3.1.2 Connect harness loop connector (**A**) into main harness connector (**C1**)
- to be removed when spreaders are reinstalled
- this will bridge the CAN BUS connection when spreaders are removed and alow the movement of the chopper actuators



3.1.3 Configure console in cab

3.2 Configure Cab Monitor Software

If combine is without a chopper, has a spreader

S7 Combine

Procedure to reconfigure software:
- Turn key switch ON. **DO NOT** start engine

3.2.1 Select Menu (**A**) in bottom right corner

3.2.2 Select System (**B**)

3.2.3 Select Diagnostics Center (**C**)

3.2.4 Select Controllers (**D**)

3.2.5 Scroll down (**E**)

3.2.6 Select HAD Controller (**F**)

3.2.7 Select the Search Bar (**G**)

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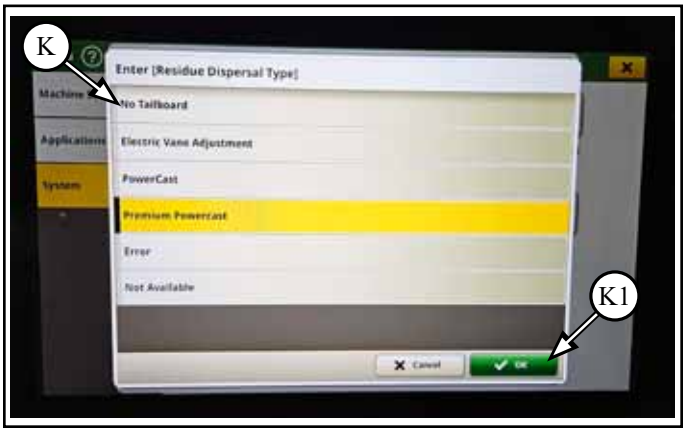
3.2.8 Type Residue (**H**) and select OK (**H1**)

3.2.9 Select Residue Dispersal Type (**J**)

3.2.10 Select No Tailboard (**K**) and select OK (**K1**)



3.2.11 Select X (**L**) to go back to Search

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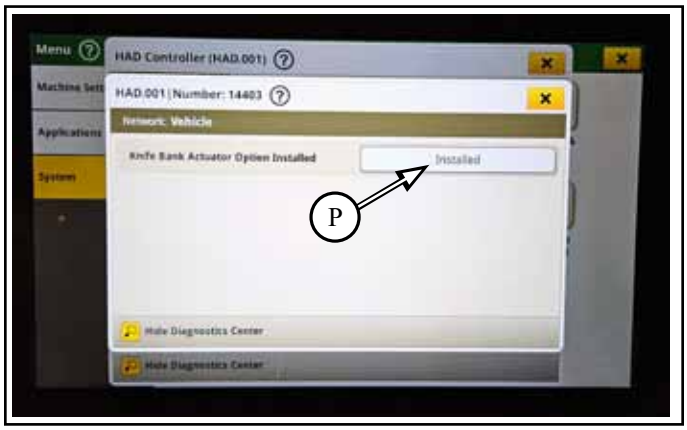
If machine was equipped with an actuated knife bar, need to uninstall feature:

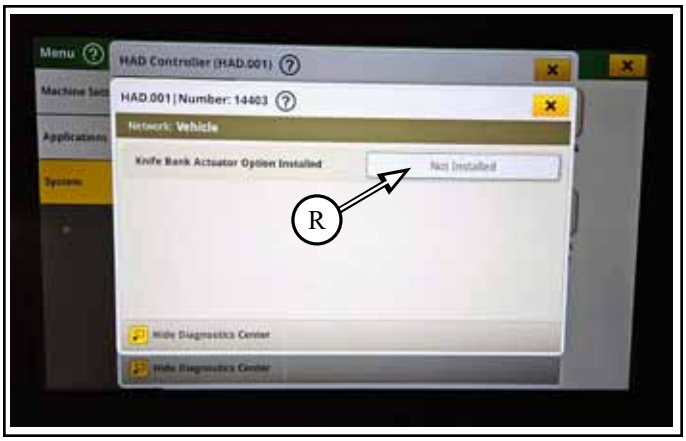
3.2.12 Search for Knife (**M**) and select OK (**M1**)

3.2.13 Select Knife Bank Actuator Option Installed (**N**)

3.2.14 Select Installed (**P**)



3.2.15 Changes to Not Installed (**P**)



CAUTION

Check all fasteners to ensure they have been properly tightened

Torque Table		
Nominal Size	Class 8.8	Class 10.9
	Nm / (ft-lbs)	Nm / (ft-lbs)
M8 - flanged	27 / (20)	39 / (29)
- non flanged	25 / (18)	35 / (26)
M10 - flanged	54 / (40)	57 / (42)
- non flanged	49 / (36)	70 / (51)
M12 - flanged	93 / (69)	134 / (98)
- non flanged	85 / (63)	121 / (90)

CAUTION

Wear Hearing Protection during operation

CAUTION

When starting chopper, be sure all people are clear of the rear of the combine

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

REDEKOP MANUFACTURING

1.866.REDEKOP (1.866.733.3567)

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For additional and the most up to date Manuals:

EQR002

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