

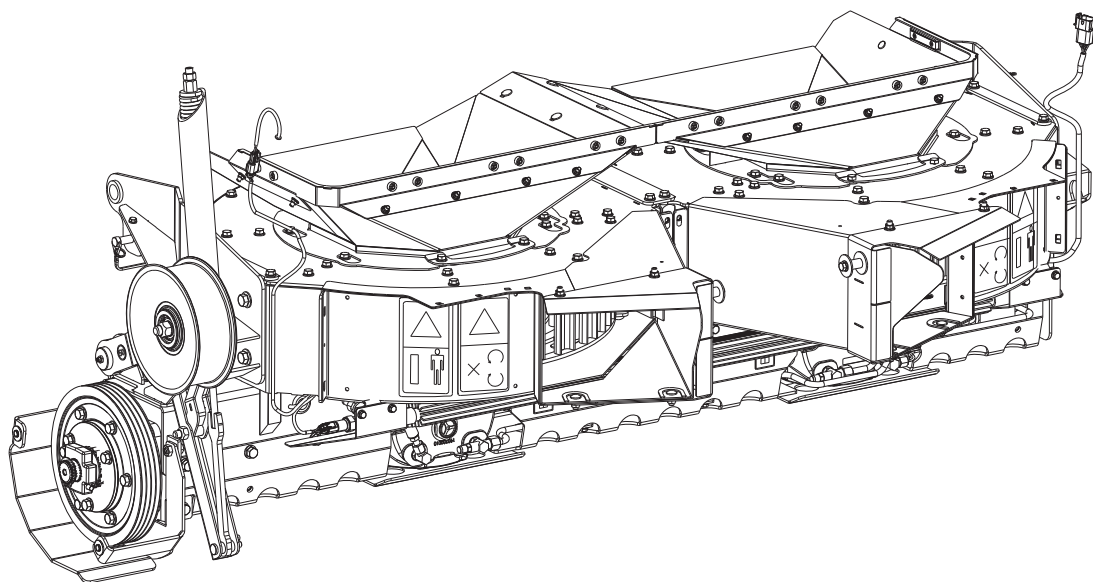
REDEKOP™

SEED CONTROL UNIT
CLAAS 7000S & 8000S
WITH OEM CHOPPER

INSTALLATION MANUAL

PRODUCT NUMBER: **850-400H**
850-450H

SC002-03_R6



Seed Control Unit

Claas 7000 & 8000 Series with OEM Chopper Installation Manual

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0 Safety

0.1 Instructions

0.1.1 IMPORTANT: Read through this instruction manual thoroughly and familiarize yourself with the Seed Control Unit before installation of these components.

This instruction manual explains the proper procedure for installation of the Redekop Seed Control Unit. Do not skip steps or perform them out of order.



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 Seed Control Unit 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 manual.

Learn how to operate the Seed Control Unit and how to use controls properly. Do not let anyone operate without instruction.

Keep your Seed Control Unit in proper working condition. Unauthorized modifications to the Seed Control Unit may impair the function and/or safety and affect the Seed Control Unit'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 straw chopper and Seed Control Unit 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 Seed Control Unit only when all guards are correctly installed.

Before moving away, always check immediate vicinity of Seed Control Unit (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.

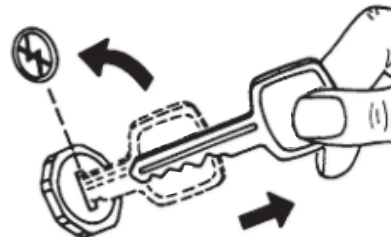


0.7 Remove Key from Ignition

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 Seed Control Unit while it is moving. Keep hands, feet and clothing away from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine 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 Seed Control Unit.



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 Seed Control Unit when it is running.



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 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 Seed Control Unit 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.

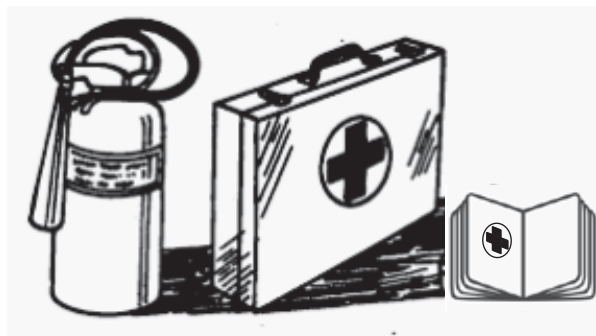


0.17 Prepare for Emergencies

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.



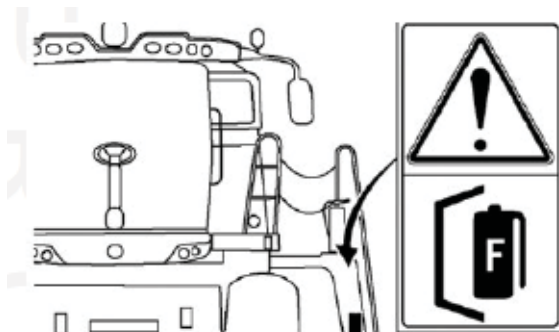
0.18 Fire Extinguisher

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 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.



0.19 Remove Accumulated Crop Debris

0.19.1 The build up of chaff and crop debris in the engine compartment, on the engine, and near 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 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.

0.21 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.

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.



Caution / Hearing Protection Required RP1090

Use hearing protection whenever operating the machine.



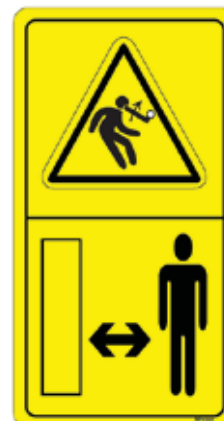
Hand Injury / Rotate Danger
RP1089

Risk of injury caused by rotating parts.



Kickback Hazard / Stand Clear
RP1086

Avoid personal injury. Kickback hazard when removing access panel.



Projectile Hazard / Stand Clear
RP872

Stay clear of these components when the engine is running.



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)



0.22 Information Decals

Redekop Seed Control Unit Serial Number Plate



Grease Every 12 Hours
RP1091



Grease Every 50 Hours
RP1092

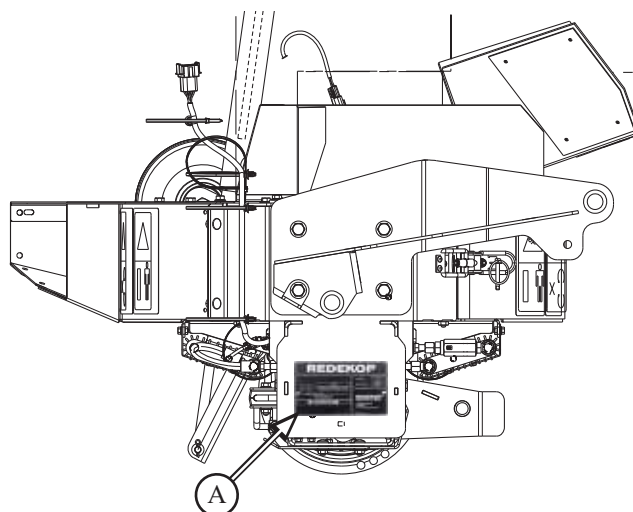


Oil - use SAE 75W90 GL5 Synthetic
RP1093



0.23 Serial Number

1. Redekop Seed Control Unit serial number (**A**):
- located on the Seed Control Unit frame, non-drive side



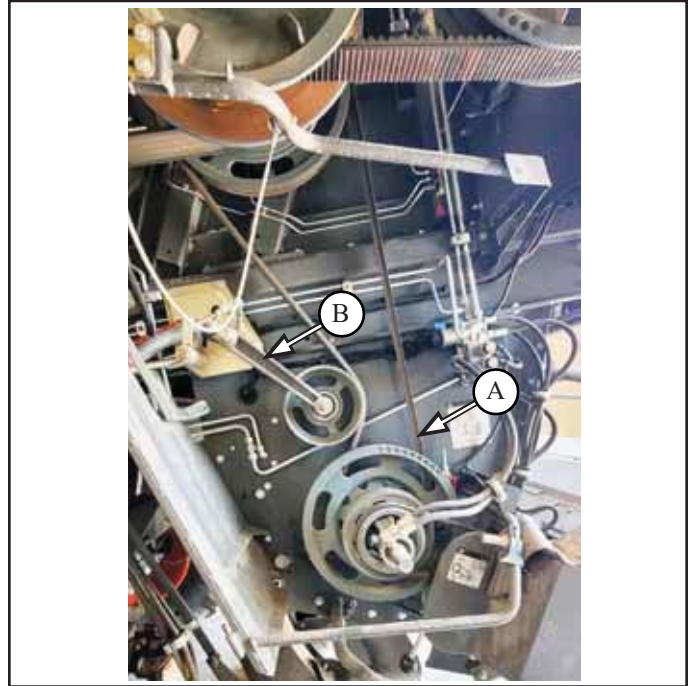
1 OEM Combine Preparation

1.1 OEM Chopper Drive Update



The following drive update is to be completed by the OEM technician

1.1.1 If the combine has the “Standard Drive” as shown - single 2 rib belt (A) with single tension arm (B), it will have to be updated to the “Premium Drive” during the install of the SCU



DO NOT install upper drive sheave (00 1807 172 1) included with kit SC830K. Part is replaced by Redekop upper drive sheave (RP1257) during install

To convert to “Premium Drive” from “Standard Drive”

1.1.2 Parts required (from Premium Drive Kit SC830K)

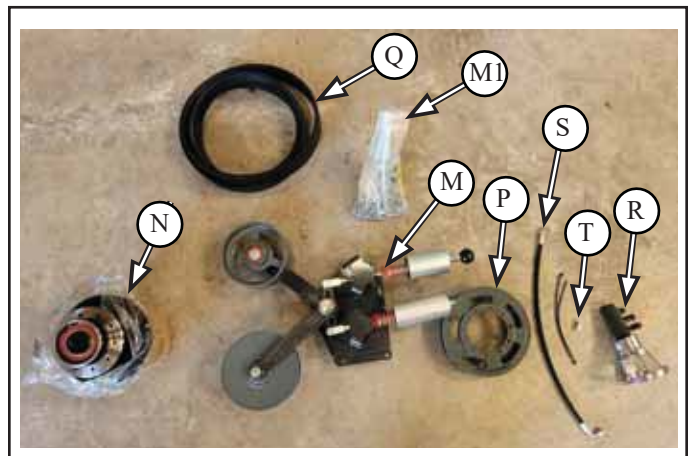
00 1807 944 5	Drive tensioner Assy (M)	Qty 1
00 2661 079 1	Chopper drive hub Assy (N)	Qty 1
00 0233 404 0	High speed chopper sheave (P)	Qty 1
00 1807 957 0	High speed drive 3B belt (Q)	Qty 1
	Large hardware bag (M1)	Qty 1

Hydraulic actuated chopper drive (if equipped)

00 2633 722 7	Premium drive hydraulic shifter (R)	Qty 1
00 1301 216 0	Hydraulic line (S)	Qty 1
00 0215 917 0	Hydraulic fitting (T)	Qty 1

The remaining parts (not shown) in this kit are not installed

Some of these remaining parts will convert from a manual to a hydraulic shifter control. Ask your Claas dealer for further details



1.1.3 Remove the following parts for install of the premium parts required for the SCU

- Standard drive tensioner assembly (**B**)
- Standard drive tensioner bracket (**B2**)
- Chopper drive hub assembly (**C**)
- Upper drive sheave (**D**)

-Spreader drive sheave (**F**) - to be reused

Hydraulic actuated chopper

- Two (2) position hydraulic cylinder (if equipped) (**E**) - to be reused

-Hydraulic block and lines (if equipped) (**G**) - to be reused

Manually actuated chopper

-Manual adjust handle (if equipped) (**H**) - to be reused

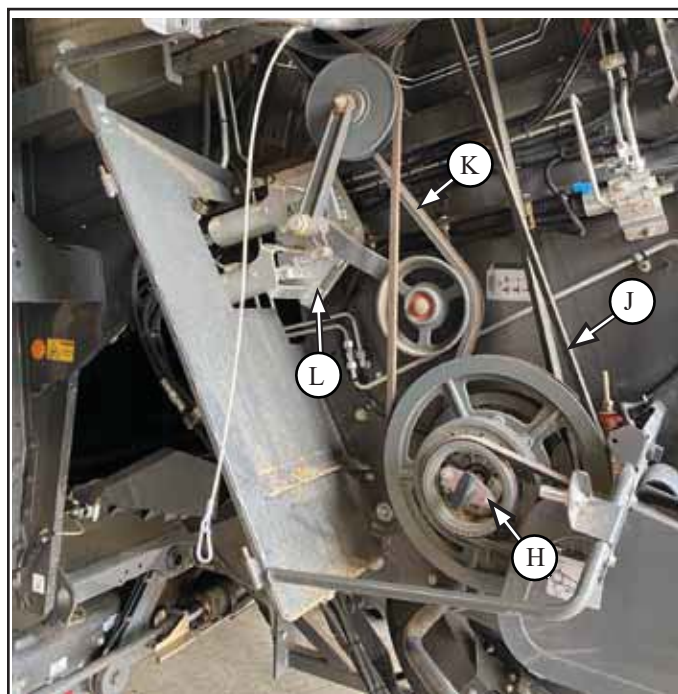
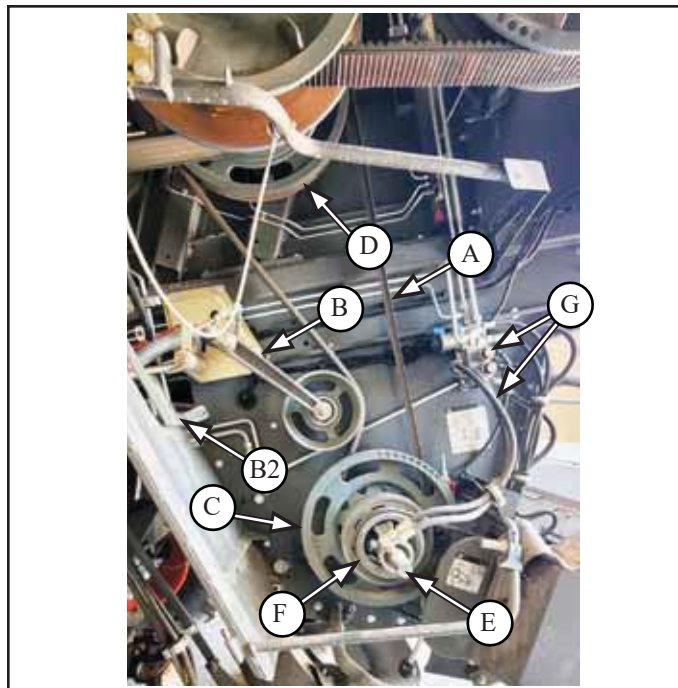


Follow provided instructions in SC830K for the removal and reinstall of the parts indicated



DO NOT install upper drive sheave (00 1807 172 1) included with kit SC830K. Part is replaced by Redekop upper drive sheave (RP1257) during install

1.1.4 If the combine has the "Premium Drive" - single C rib belt (**J**) and 3 rib B belt (**K**) and dual arm tensioner (**L**), no update required



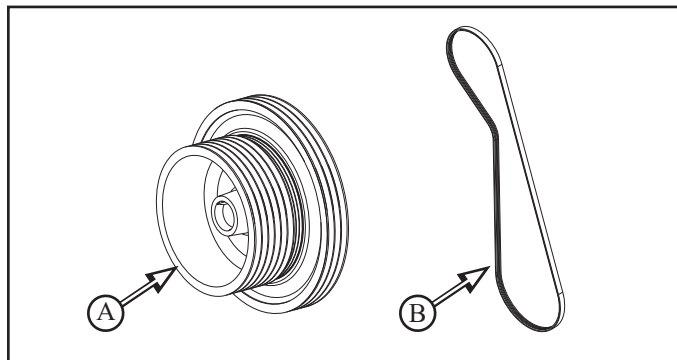
1.2 OEM Drive Sheave, Belt Replacement and Drive Updates



The following upper drive sheave and belt replacement procedure is to be completed by the OEM technician

Parts List:

RP1257	Sheave PTO 3M Claas (A)	Qty 1
BE3M143K	V Belt 3M 143L Kevlar (B)	Qty 1



1.2.1 Remove OEM upper drive sheave and replace with new PTO 3M sheave (A)
- belt will not be installed and tensioned at this time, installation is completed in later steps

1.2.1.1 If combine has been converted from a “Standard Drive” to a “Premium Drive” chopper as detailed in section 1.1. The 2 rib chopper drive belt must be removed and replaced with the new 3 rib belt provided with kit SC830K

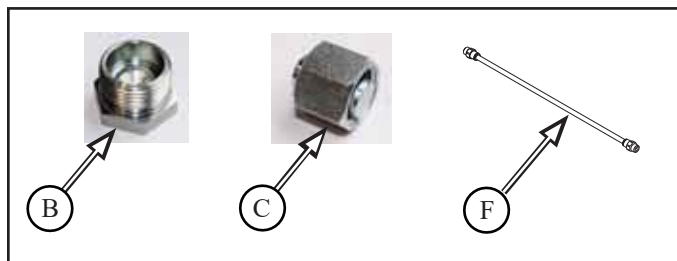
1.2.2 Remove existing upper drive belt and replace with new 3M143K drive belt (B) onto new sheave (A)



1.3 OEM Chopper Preparation

Parts List:

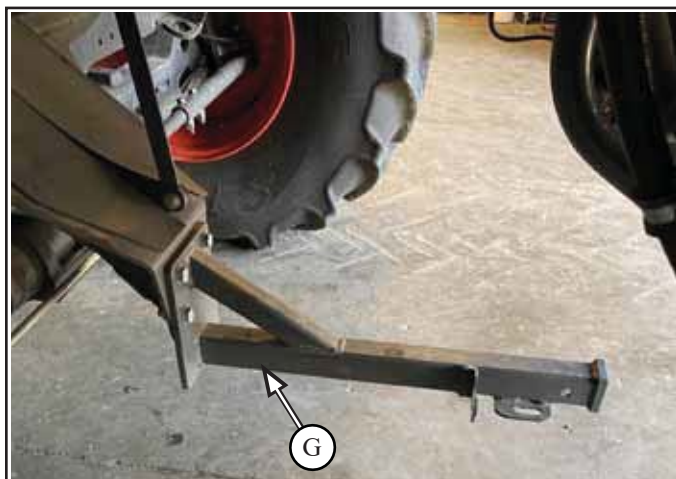
H10M-10 Fit Hyd Cap 10 24deg Tape (B) Qty 1
H15M-10 Fit Hyd Plug 10 24deg Taper W/O Ring (C) Qty 1
- SC513S Hardware Bag
SC820A Plastic Grease Line Fitting Assy (F) Qty 2



1.3.1 Remove rear guard frame arms (AH) from rear of combine above power spinners
- to be reinstalled



1.3.2 Remove hitch (G)
- hitches may vary depending on region
- hardware to be reused
- North American and Rockinger hitch to be reinstalled
- hitch not to be reused



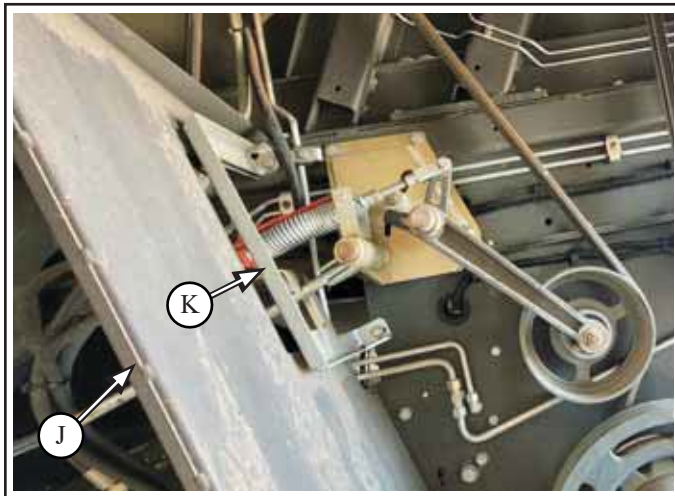
1.3.3 Remove bottom shield (**H**) by lifting it off of the hinges
- to be reinstalled



1.3.4 Remove front shield (**J**) and shield support (**K**)
- hardware to be reused
- front shield not to be reused



1.3.4.1 Ensure the tension link support bracket (**K**) for the standard drive is removed



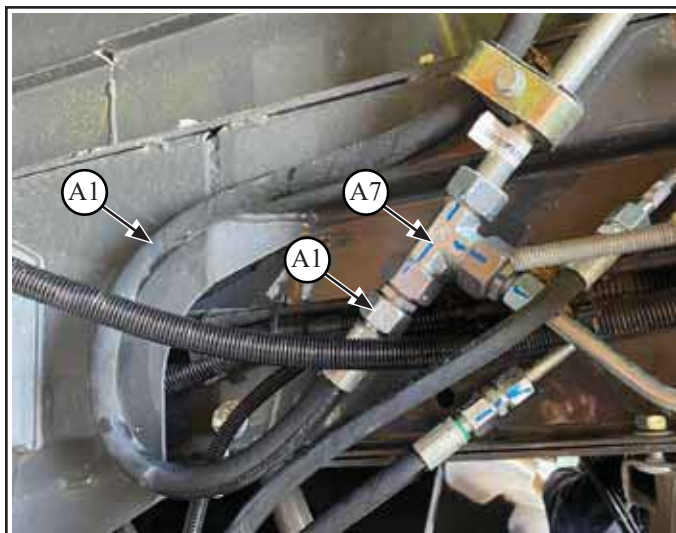
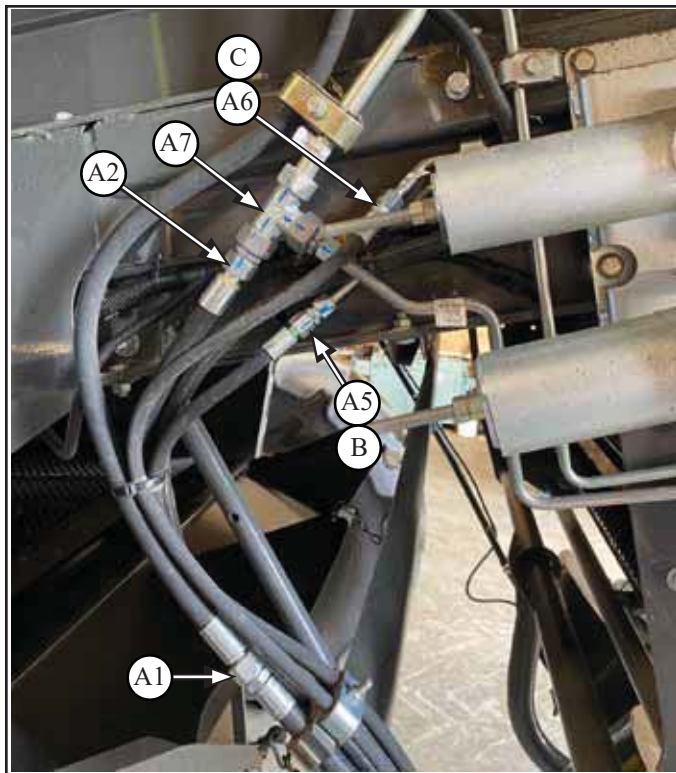
1.3.5 Disconnect chaff spreader spinner hydraulic lines (**A1** & **A2**)

1.3.5.1 Loop hydraulic line (**A1**) back into Tee (**A7**)

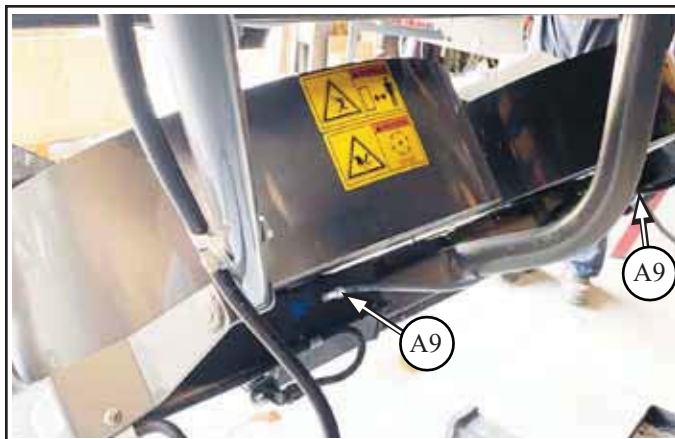
1.3.6.2 Disconnect chaff spreader outlet hydraulic line (**A5** & **A6**) to chaff spreader

1.3.6.3 Cap line (**A5**) with:
- H10M-10 Cap (**B**)

1.3.6.4 Plug line (**A6**) with:
- H15M-10 Plug (**C**)



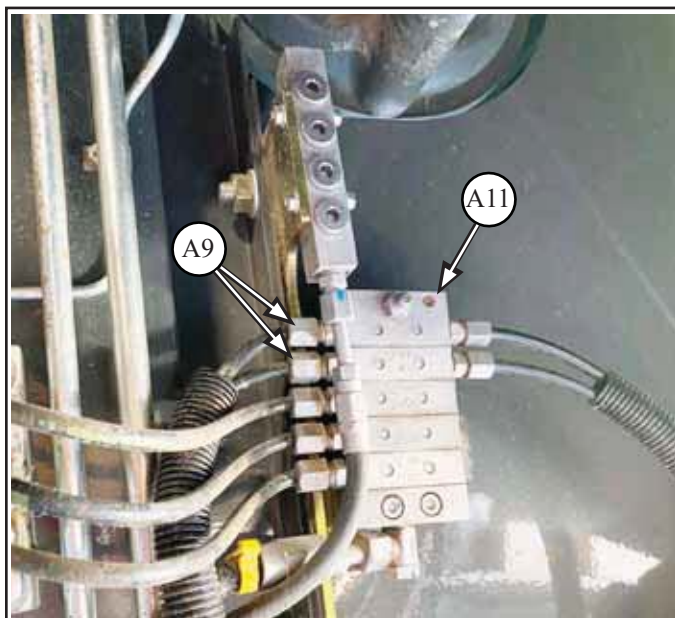
1.3.7 Disconnect auto grease line (**A9**) x2 from the chaff spreaders
- remove the grease lines from the chaff spreader support arm



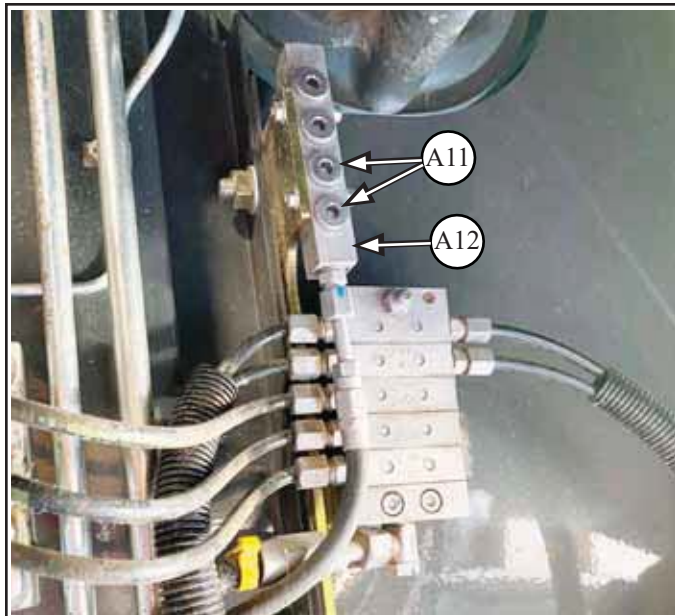
1.3.7.1 Remove the grease lines (**A9**) from the chaff spreader support arm



1.3.7.2 Remove grease lines (**A9**) x2 from the grease block (**A11**)
- not to be reused

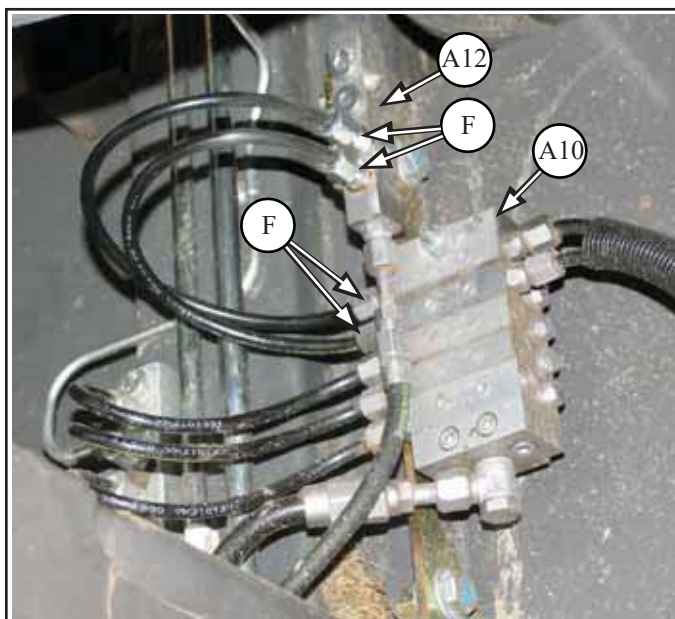


1.3.7.3 Remove plug fittings (**A11**) x2 from grease block (**A12**)



1.3.7.4 Install one end of new fitting assembly (**F**) x2 into grease block (**A12**)

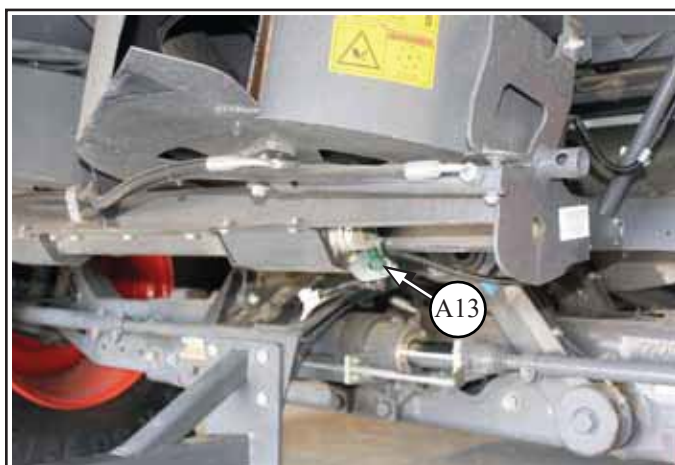
1.3.7.4.1 Install other end of new fitting assembly (**F**) x2 into grease block (**A10**)



1.3.8 Remove the speed sensor (**A13**) from the chaff spreader

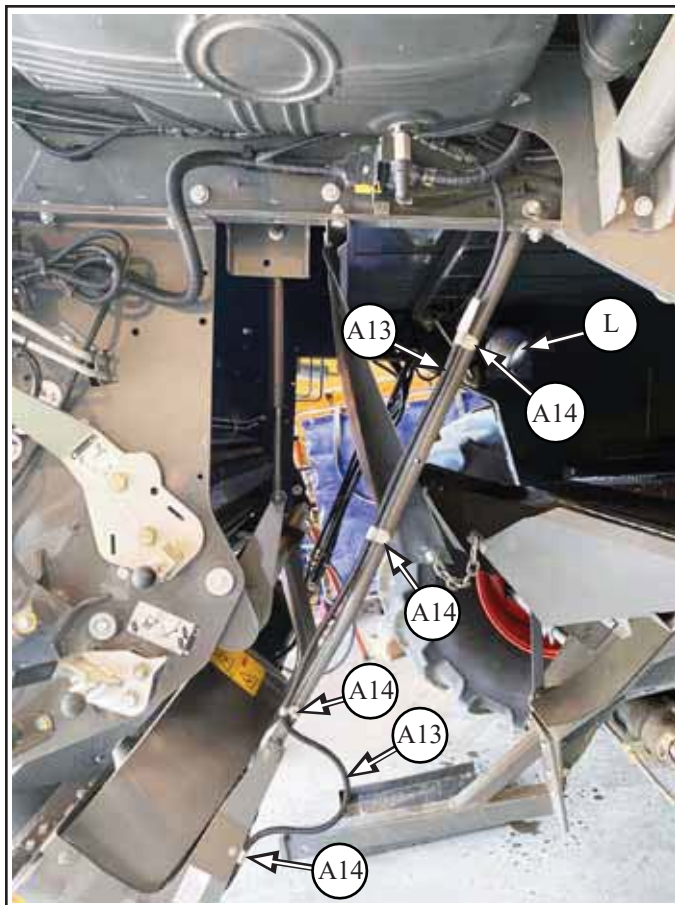


If the chaff spreader speed sensor is not removed from the chaff spreader prior to removal from the combine, sensor can be damaged

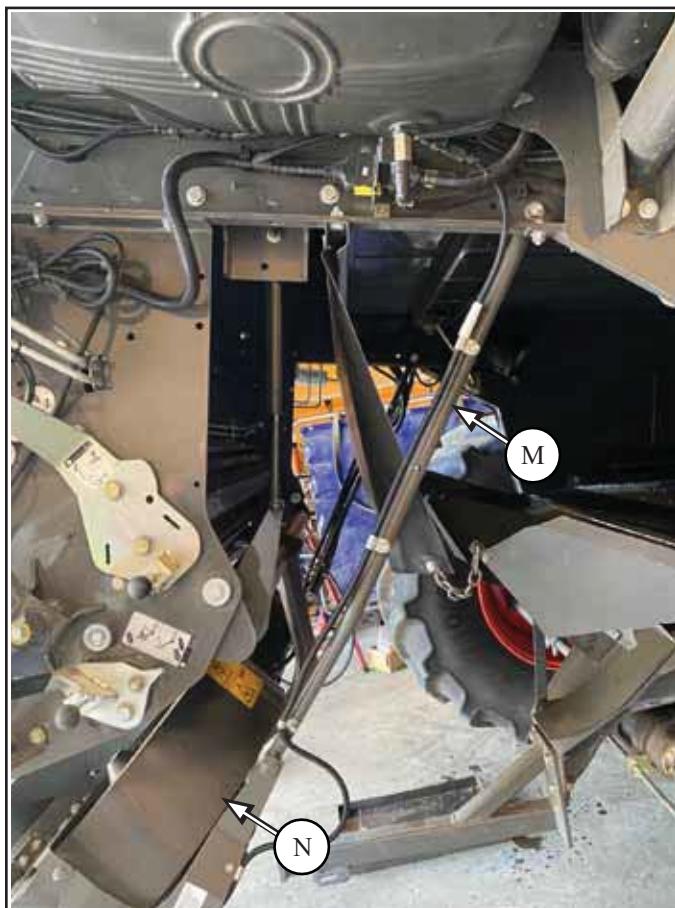
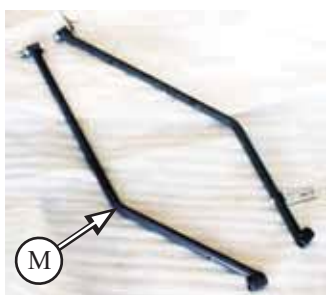


1.3.8.1 Remove the speed sensor harness (**A13**) from the clips (**A14**) on the chaff spreader support arm
- harness to be reinstalled

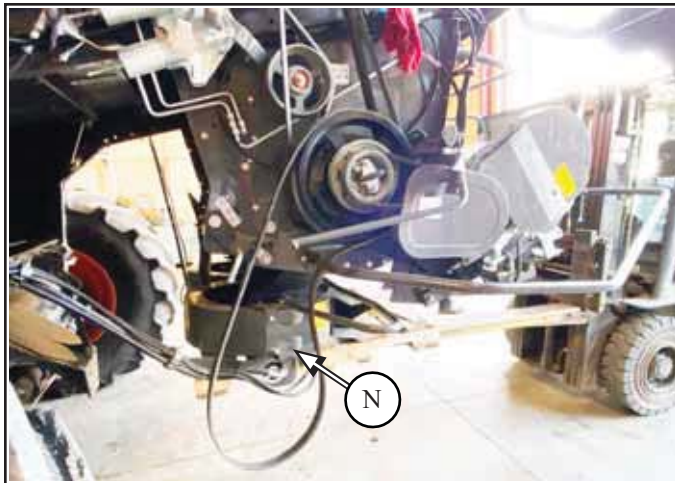
1.3.8.2 Remove light (**L**) above sieve extension inside of combine
- to be reinstalled



1.3.9 Remove arms (**M**) x2 from inside of combine and spreader (**N**)
- arms not to be reused



1.3.10 Support spreader (**N**) with forklift for removal from combine

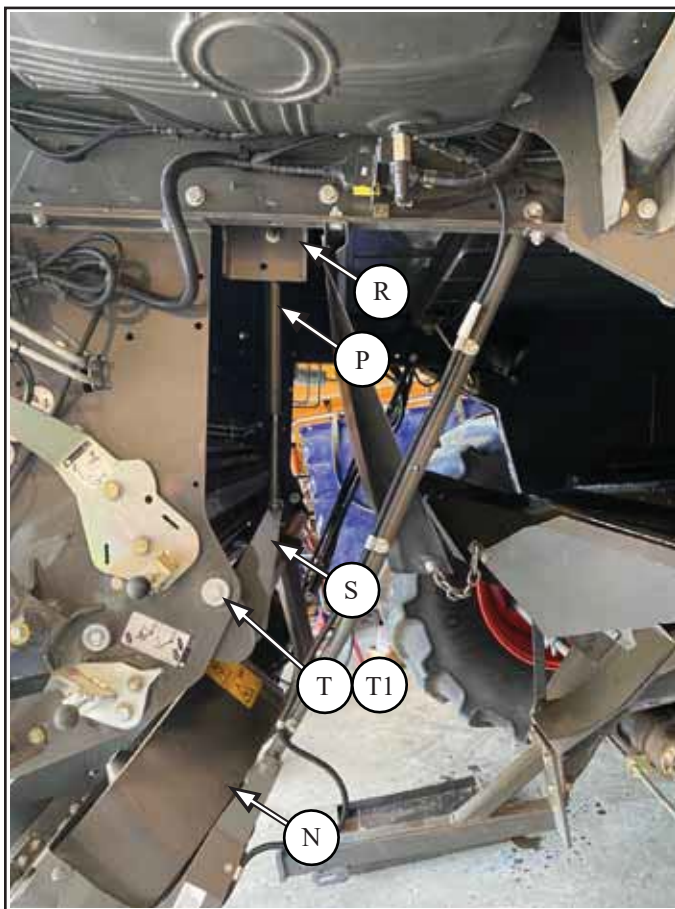


1.3.10 Remove gas shock (**P**) from combine bracket (**R**) and linkage bracket (**S**)
- both sides
- not to be reused

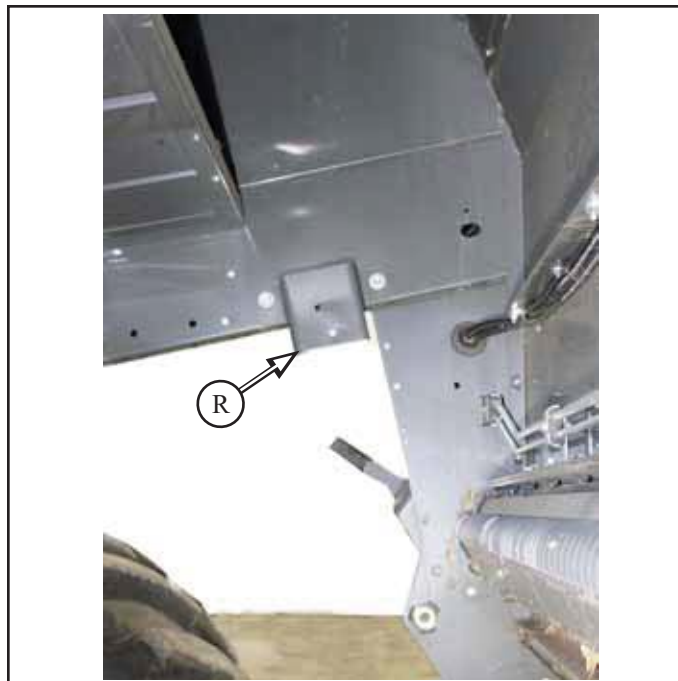
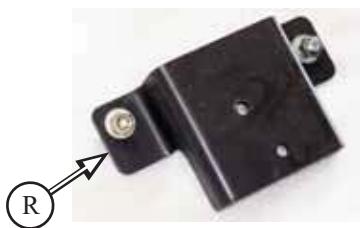
1.3.11 Remove bushing (**T**) from chopper
- both sides
- not to be reused

1.3.11.1 Remove poly bushing (**T1**) from hole
- not to be reused

1.3.12 Remove spreader (**N**) from below chopper
- not to be reused



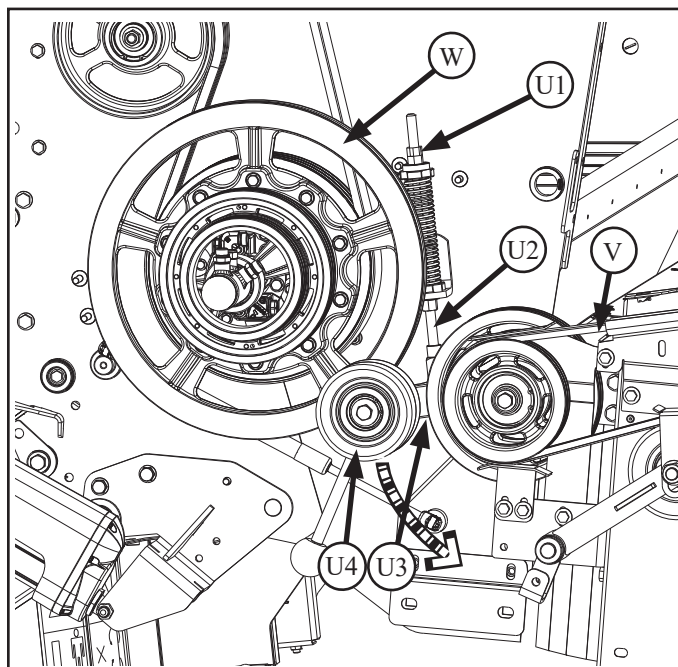
1.3.13 Remove bracket (**R**) from inside of combine
- bracket not to be reused



1.3.14 Detension tension adjustment spring (**U1**) for spreader drive belt (**V**)

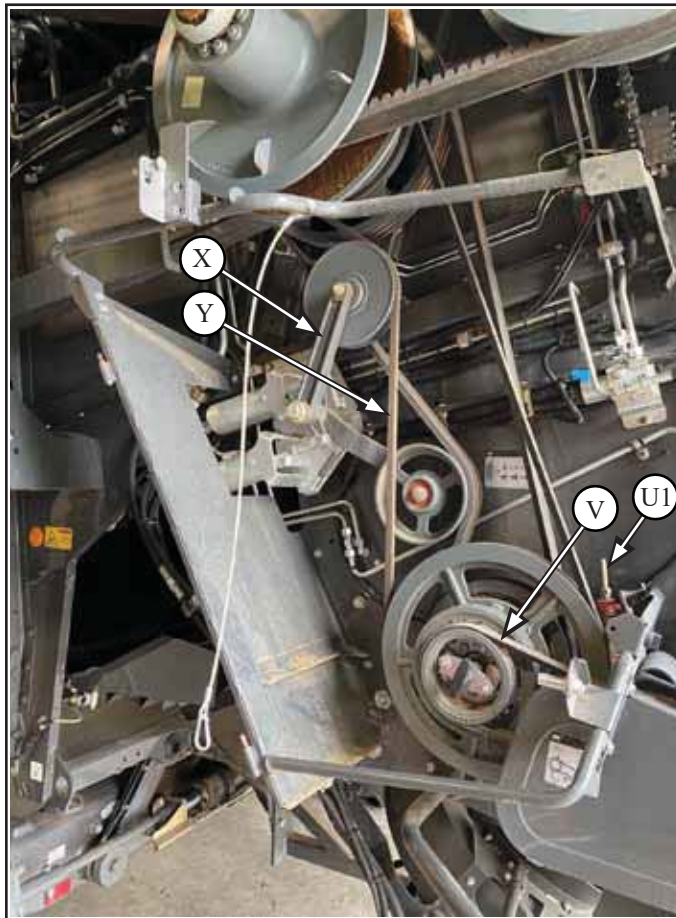
1.3.14.1 Disconnect tension rod (**U2**) from tension arm (**U3**)

1.3.14.2 Rotate tension idler (**U4**) down to provide clearance to remove sheave (**W**)



1.3.15 Remove spreader drive belt (**V**) from sheave
- to be reinstalled

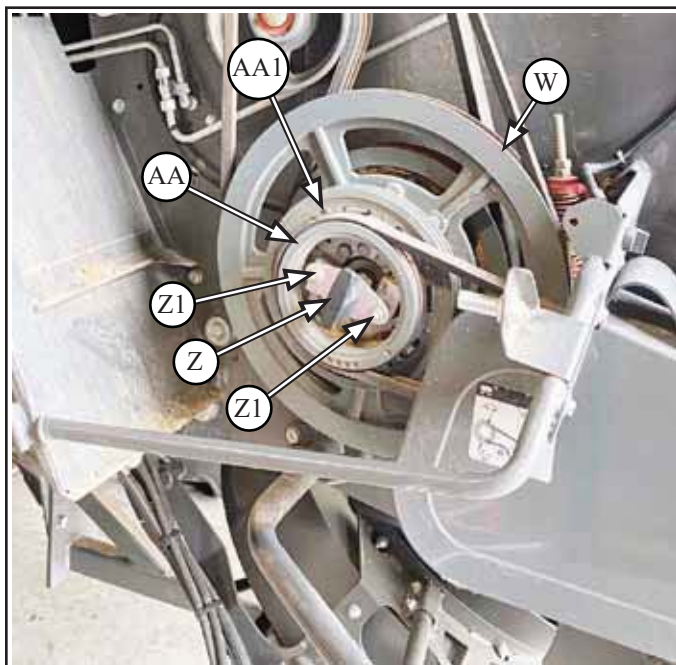
1.3.16 Loosen chopper drive belt tensioner (**X**)
-if not done already



Manual Premium Drive Adjust

1.3.17 Remove the shifter handle (**Z**)
- handle (**Z**) and hardware (**Z1**) to be reused
- remove all hardware off of shifter studs
- note position of manual shifter handle. Will need to be reinstalled in similar position

1.3.17.1 Remove straw spreader drive sheave (**AA**)
- sheave (**AA**) and hardware (**AA1**) x10 to be reinstalled

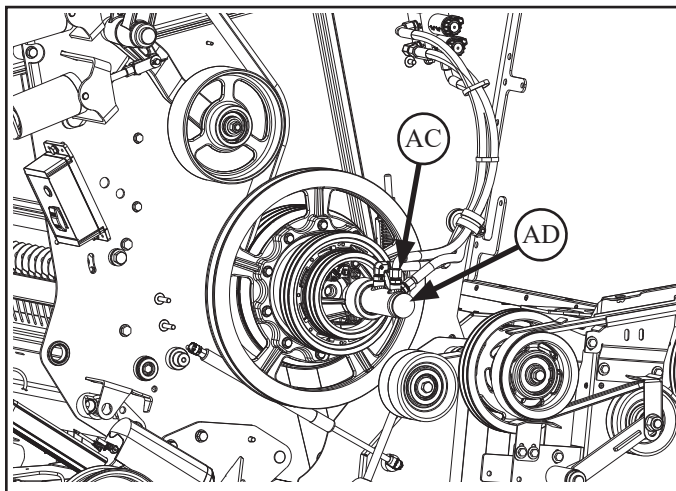


Hydraulic Premium Drive 3 Position Adjust

1.3.18 Label hydraulic hoses (**AC**) x3 and matching fittings on motor (**AD**) for future reinstallation

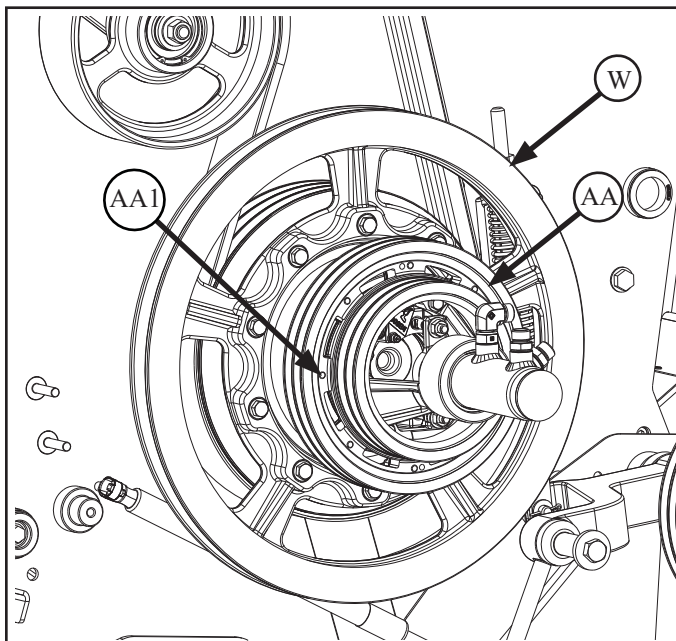
1.3.18.1 Disconnect hydraulic hoses (**AC**) x3 from motor (**AD**)

- cap off hoses
- to be reinstalled



1.3.18.2 Remove spreader drive sheave (**AA**)

- sheave (**AA**) and hardware (**AA1**) x10 to be reinstalled

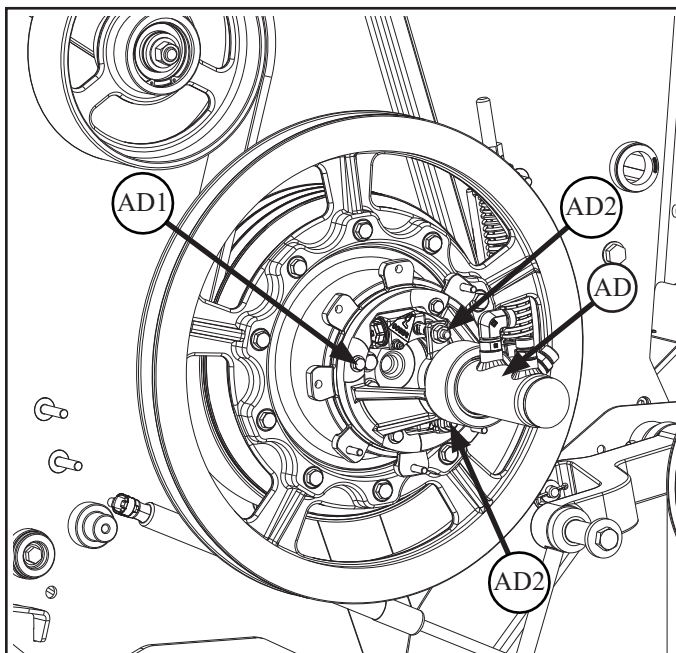


1.3.18.3 Loosen nut (**AD2**) x2

- rotate frame (**AD**) to remove

1.3.18.3.1 Remove hydraulic motor and frame (**AD**)

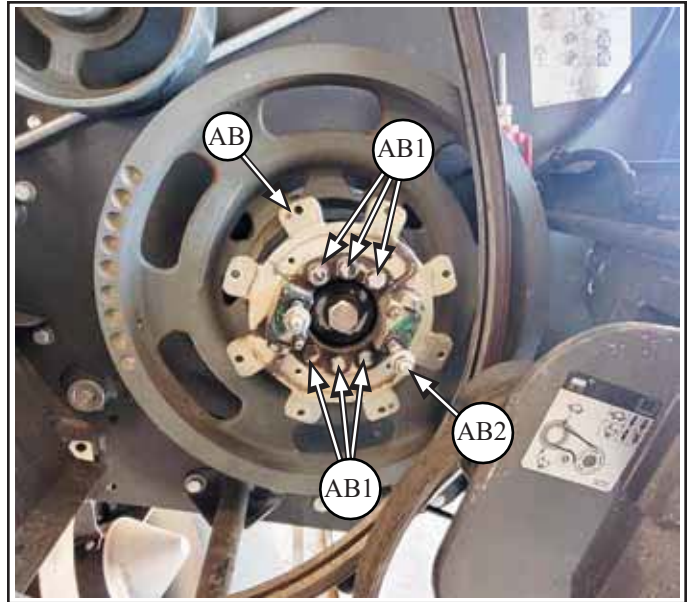
- motor (**AD**) and hardware (**AD1**) x4 to be reinstalled



Common parts:

1.3.18.4 Remove tailboard shifter cover (AB)

- hardware (AB1) x6
- ensure hardware (AB2) x2 is removed from shifter studs
- to be reused

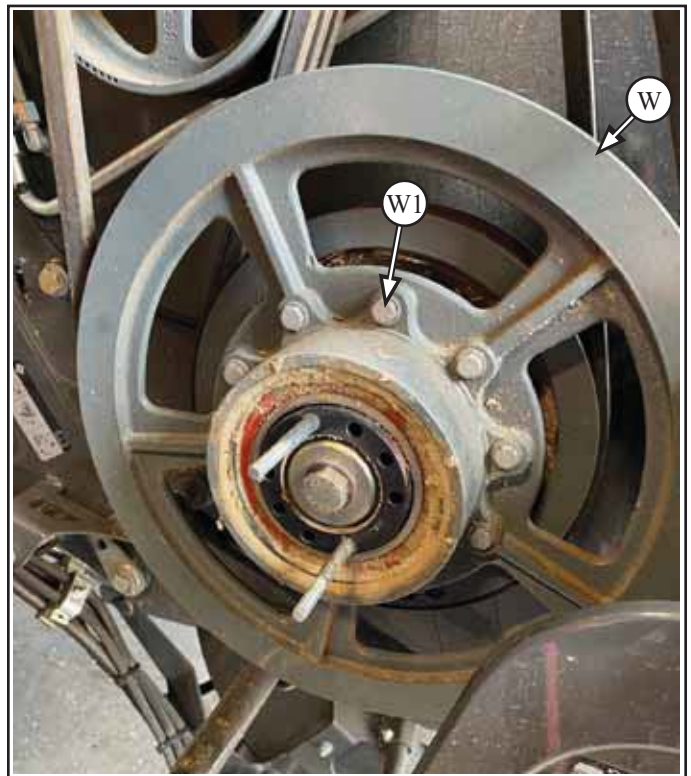


Early MY22 and older

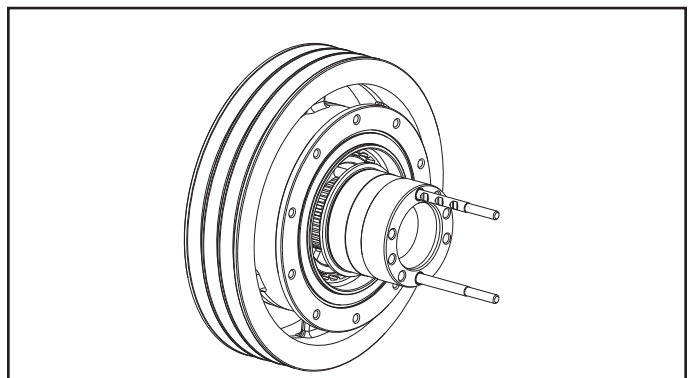
- Sheave with bearing hub (W) are a single piece

1.3.19.5.1 Remove large OEM sheave (W)

- use a puller to remove sheave
- hardware (W1) x10 to be reinstalled
- sheave and bearing assembly not to be reused



1.3.19.5.2 View with shifter handle, straw spreader drive sheave, shifter cover and large sheave removed

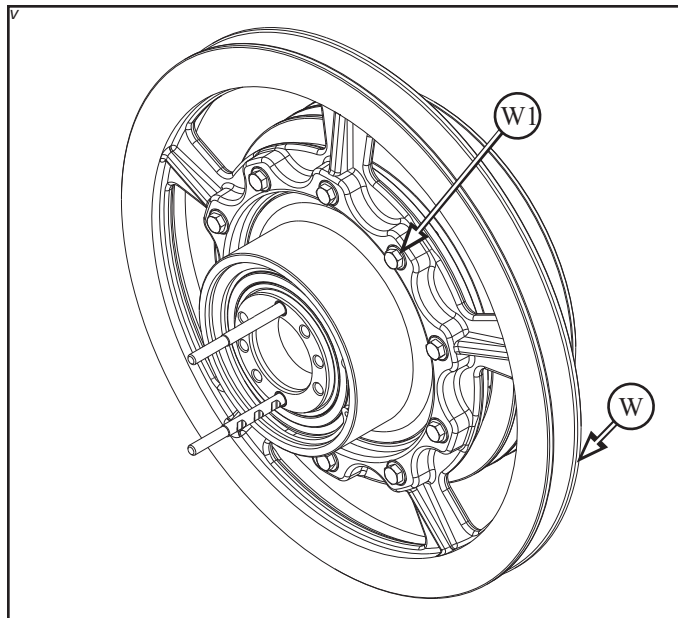


Later MY22 and newer

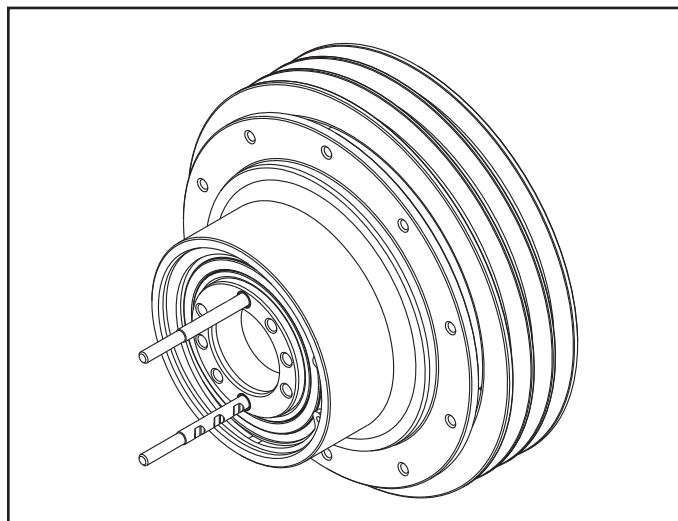
-Sheave (W) is separate from bearing hub

1.3.19.6.1 Remove large OEM sheave (W)

- hardware (W1) x10 to be reinstalled
- sheave not to be reused



1.3.19.6.2 View with shifter handle, straw spreader drive sheave, shifter cover and large sheave removed



Common parts:

1.3.19 Remove chopper drive belt tensioner idler (X1)

- from arm tensioner arm (X)
- idler (X1) not to be reused
- hardware to be reinstalled

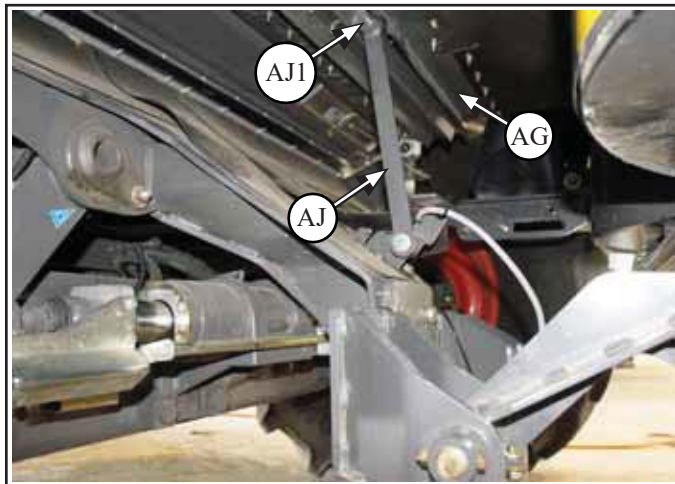


1.3.20.1 Remove chaff curtain (**AF**) from sieve extension (**AG**) and combine at chained locations (**AF1**) x3, (**AF2**) x2
- chaff curtain not to be reinstalled

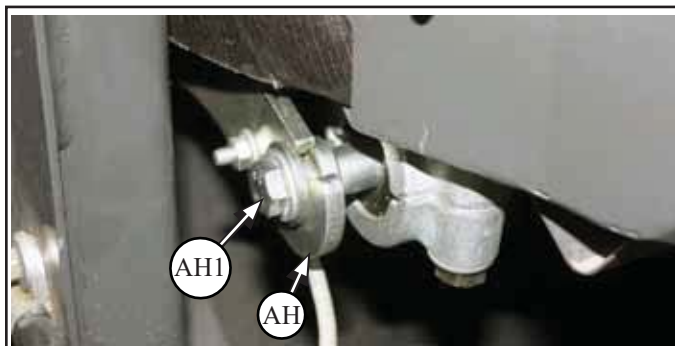


1.3.21 Sieve Extension Removal

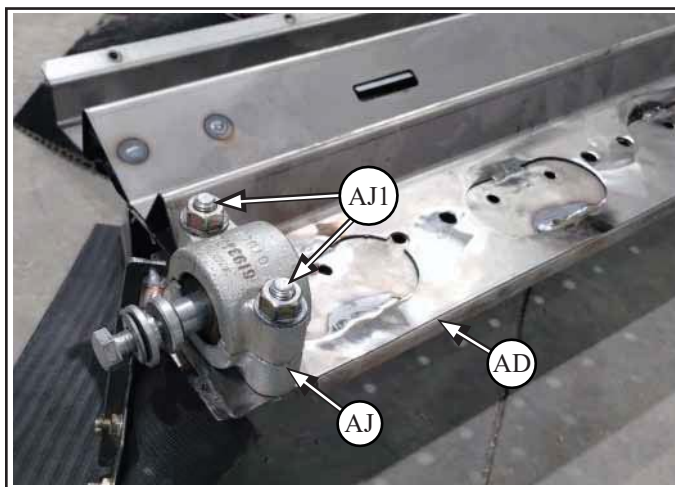
1.3.21.1 Detach top of sieve extension support arm (**AJ**) from bottom of sieve extension (**AG**)
- hardware (**AJ1**) to be reused



1.3.21.2 Loosen bolt (**AH1**) attaching sieve extension assembly (**AD**) to arm hooks (**AH**)
- both sides



1.3.21.3 Remove sieve extension bushing assembly (**AJ**) from sieve extension (**AD**)
- both sides
- mounting hardware (**AJ1**) x2 and bushing assembly (**AJ**) x2 to be reinstalled on new sieve extension



2 Seed Control Unit Installation

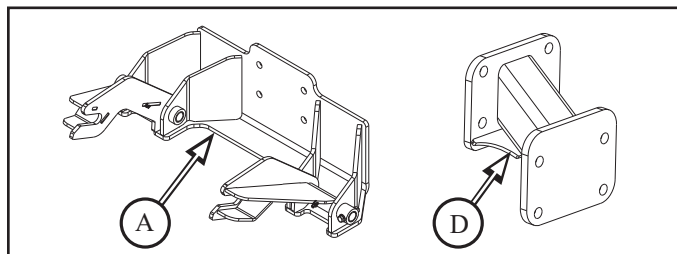
2.1 SCU Hitch Support Installation

Parts List:

SC516CA SCU Hitch Support (**A**)
SC1031C Adaptor Hitch (**D**)
- SC1031S Hardware Bag

Qty 1

Qty 1

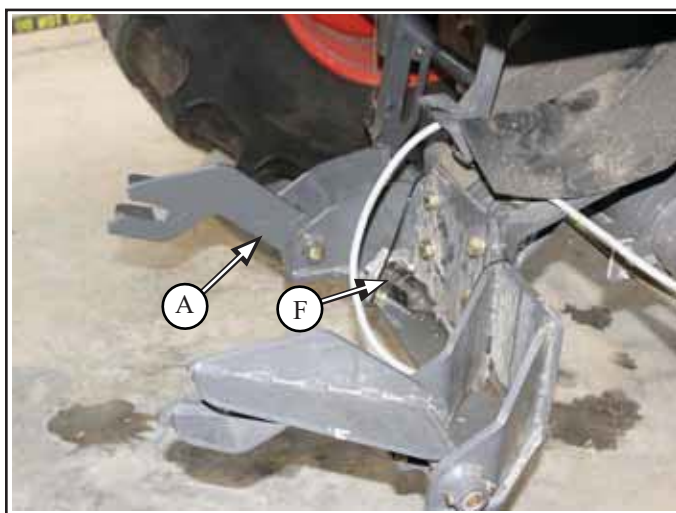


2.1.1 Install SCU hitch support (**A**) onto combine rear hitch plate (**A2**), with:

- reuse existing hardware (**A1**) x4

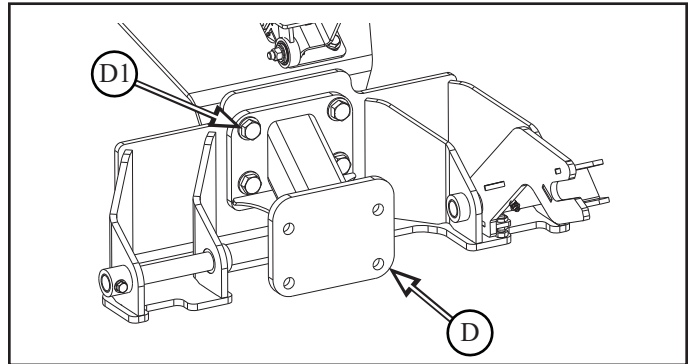


2.1.2 Reinstall or tie up electrical connector extension (**F**) to support frame (**A**)

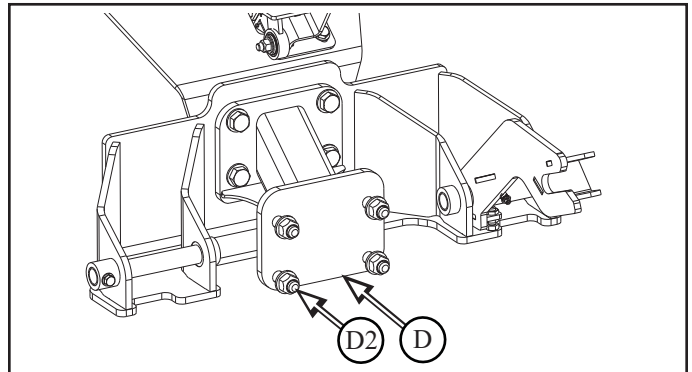


The following OEM hitches may be reinstalled if applicable:

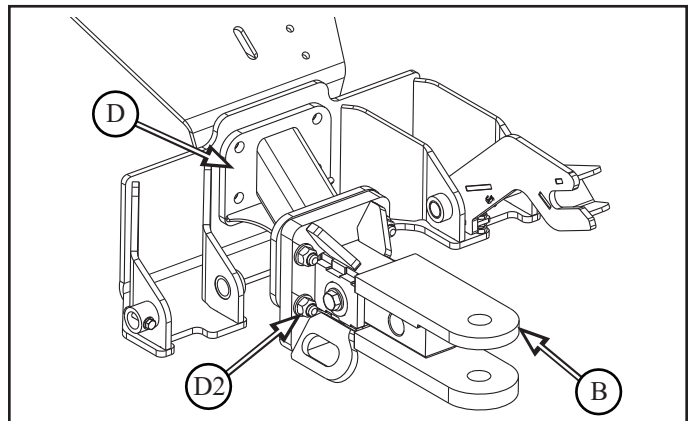
2.1.4 For any other style of hitch, install adaptor hitch (D): with,
- reuse existing hardware (D1) x4



2.1.4.1 Install any other style of hitch to adaptor hitch (D): with,
- M16 x 60 flange head bolt, flat washer and lock nut (D2) x4

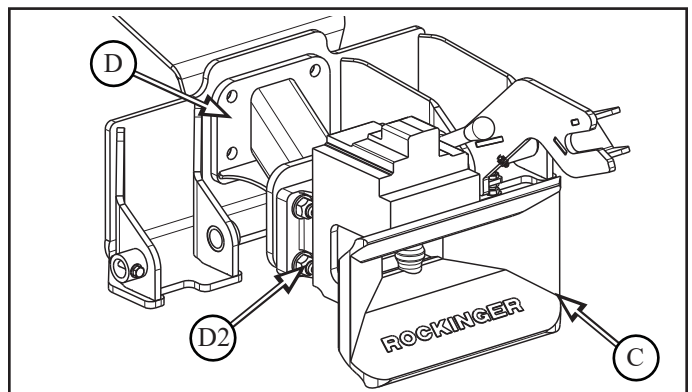


2.1.3 Reinstall North American Hitch (B), to adaptor hitch (D), with:
- M16 x 60 flange head bolt, flat washer and lock nut (D2) x4



2.1.4.2 Reinstall Rockinger Hitch (C) onto adaptor hitch (D)
- M16 x 60 flange head bolt, flat washer and lock nut (D2) x4

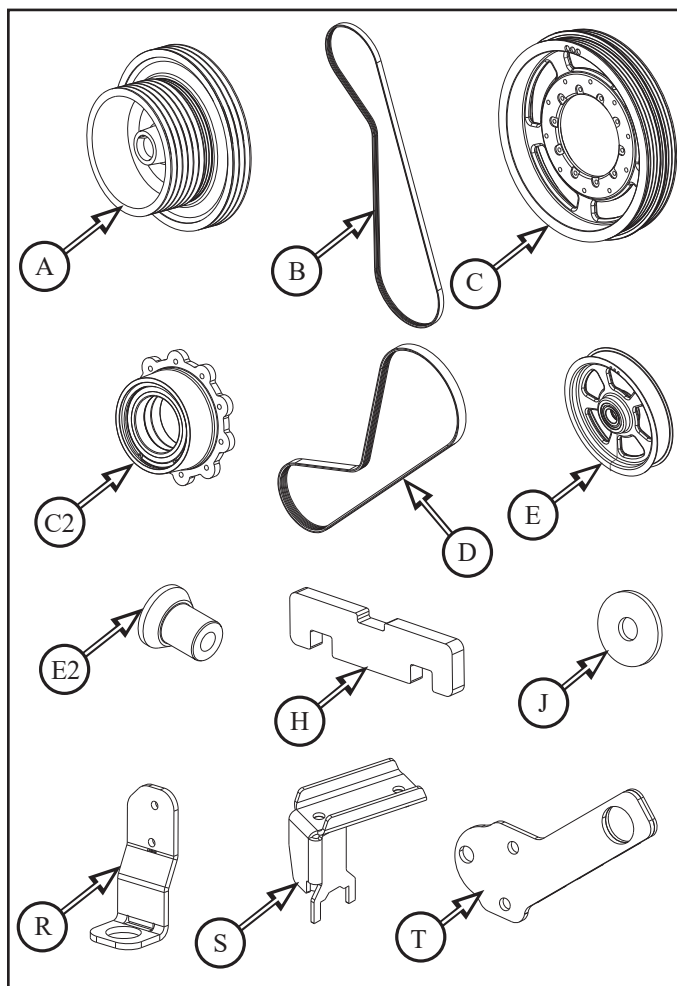
Note: required if towing Claas header trailer



2.2 SCU Drive Installation

Parts List:

RP1257	Sheave PTO 3M Claas (A)	Qty 1
BE3M143K	V Belt 3M 143L Kevlar (B) Chopper	Qty 1
RP1504	Sheave Chopper 3M/4M Claas (C)	Qty 1
RP1505A	Hub Driver SCU Claas Assy (C2)	Qty 1
BE4M119K	V Belt 4M 119L Kevlar (D) SCU	Qty 1
SC514CA	Slow Speed Tensioner Idler (E)	Qty 1
SC513Z	Bushing (E2)	Qty 1
SC1013-01	Hyd Actuator Spacer Block (H)	Qty 1
SC1009Z	Idler Spacer (J)	Qty 1
SC1242C	Bracket Spring Relocation (R)	Qty 1
SC1215C	Bracket Offset Idler (S)	Qty 1
SC1032C	Tension Rod Support Bracket(T)	Qty 1
	- 8000 Series Only	

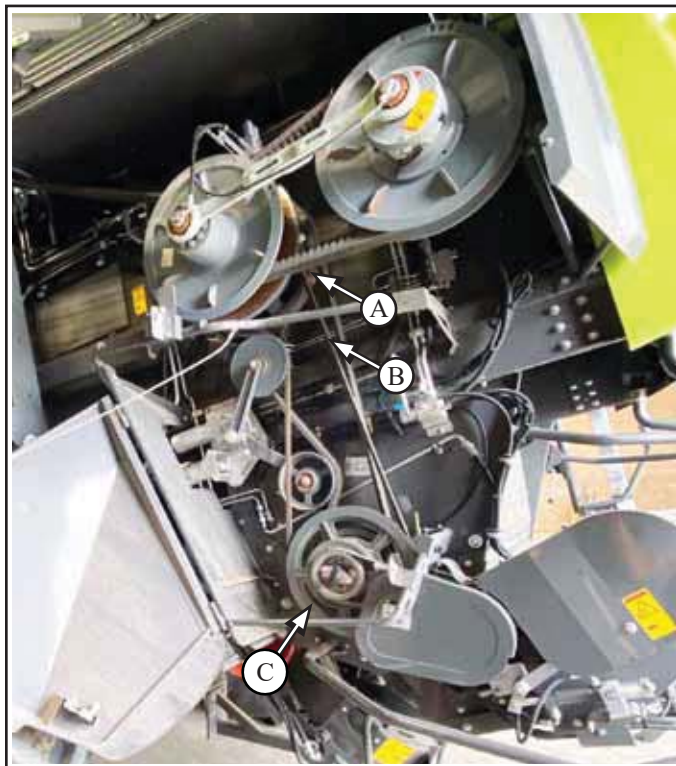


Ensure that the following chopper drive and upper drive sheave and belt have been replaced by the OEM technician as per 1.1 and 1.2

2.2.1 Ensure that the OEM upper drive sheave has been removed and replace with new Redekop PTO 3M sheave (A)

2.2.1.2 Ensure that the existing upper drive belt has been removed and replaced with new BE3M143K drive belt (B) onto new sheave (A)

2.2.1.3 Ensure that If the combine has the "Standard Drive" - single 2 rib belt it has been updated to the "Premium Drive" as detailed in section 1.1



2.2.2 Install 3M/4M sheave (**C**) onto chopper shifter assembly (**Q**), with:

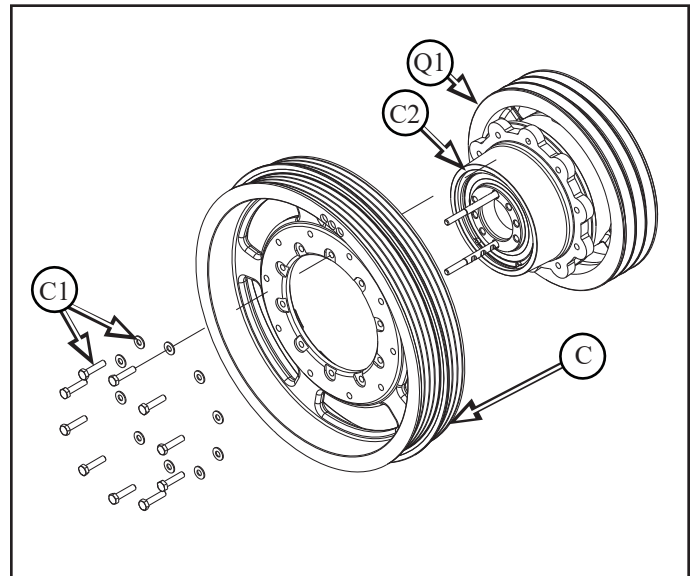
Early MY22 and older

2.2.2.1 For **early MY22 and older** use both RP1504 (**C**) and RP1505A (**C2**).

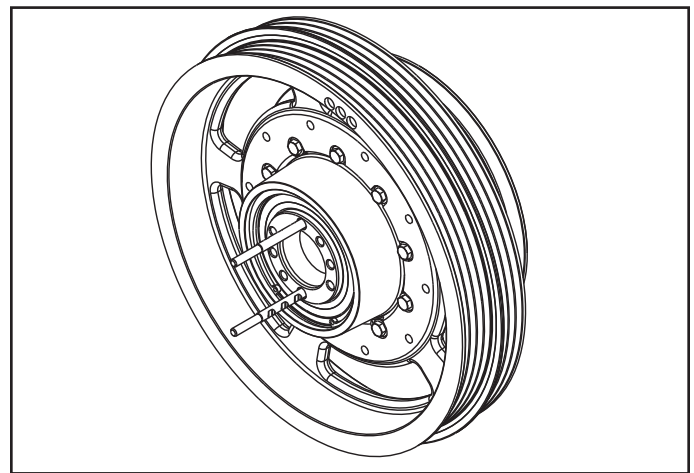
-Install RP1505A onto chopper shifter assembly (**Q1**) first followed by RP1504.

-Reuse hardware (**C1**)

-Tighten in a radial pattern



View of Assembly



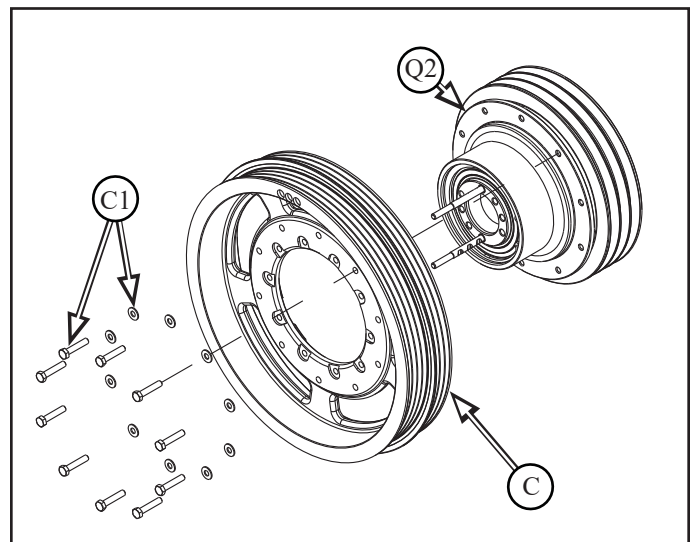
Later MY22 and newer

2.2.2.2 For **later MY22 and newer** use only RP1504 (**C**).

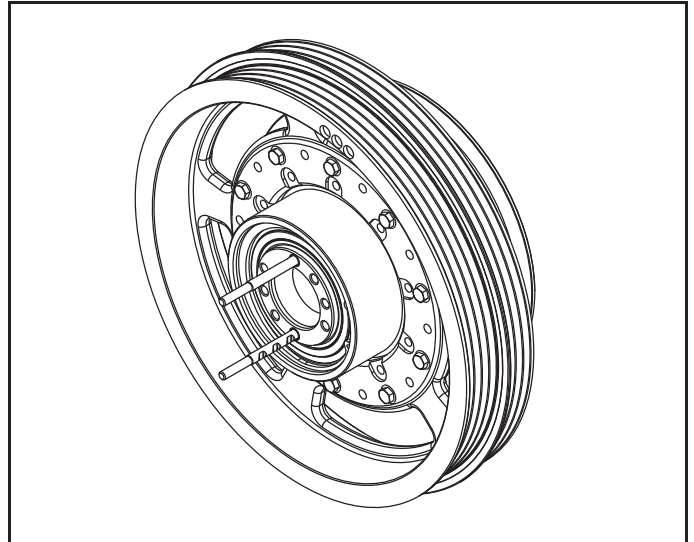
-Install RP1504 onto chopper shifter assembly (**Q2**)

-Reuse hardware (**C1**)

-Tighten in a radial pattern

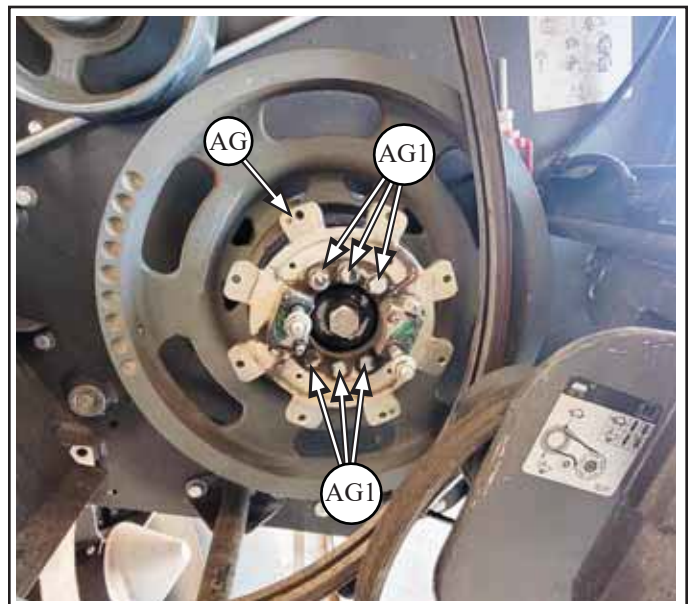


View of Assembly



Common Parts:

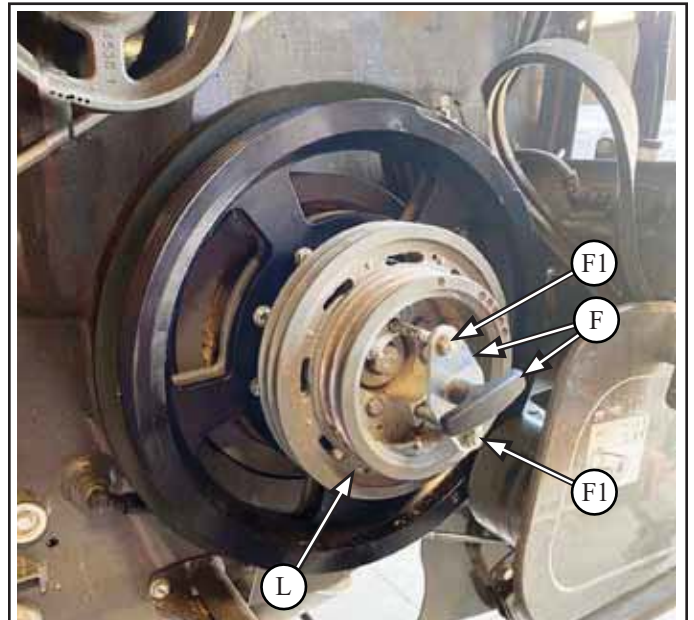
- 2.2.3** Install tailboard shifter cover (**AG**), with:
- reuse existing hardware (**AG1**) x6
 - torque to Claas spec for M8 10.9 bolt (36 Nm/26.5 lb-ft)



Manual Shifter:

- 2.2.4** Reinstall spreader sheave (**L**)
- Reuse existing hardware (**L1**)

- 2.2.4.1** Reinstall shifter handle assembly (**F**)
- ensure plate is even on studs - 5mm of threads protruding past nuts (**F1**) x2
 - Ensure nuts and washers (**F1**) on both sides of handle (**F**)

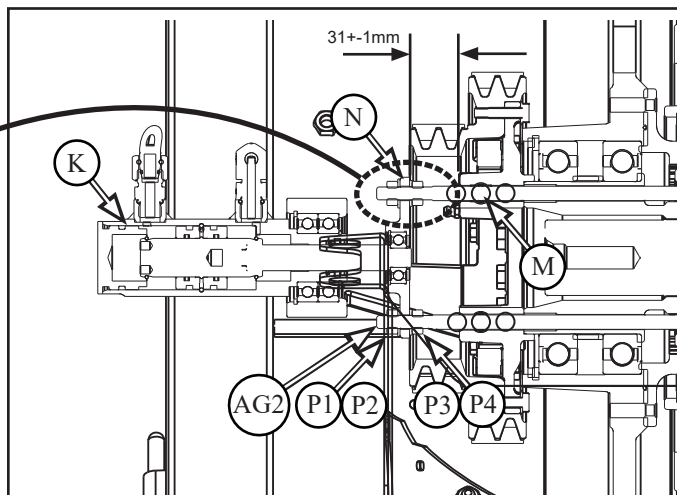
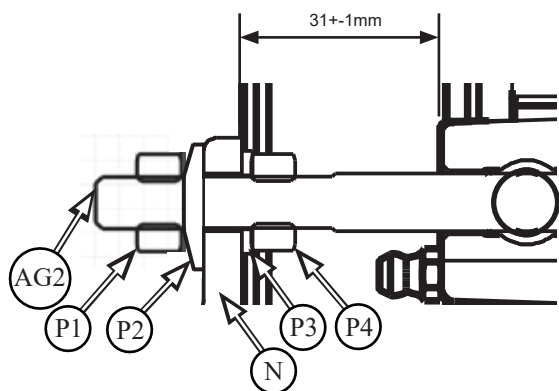
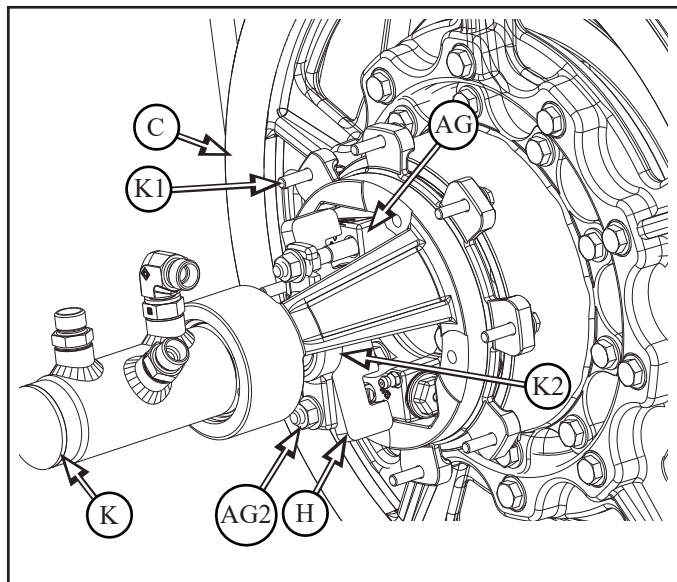


Hydraulic Shifter:

2.2.5.1 Reinstall hydraulic shifter assembly (**K**), with:
- reuse existing hardware (**K1**)

2.2.5.2 Place spacer block (**H**) between base (**K2**) of hydraulic shifter (**K**) and tailboard shifter cover (**AG**)
- this will set space at 31mm $\pm$ 1 which will set threaded rod to 2nd/middle detent (**M**) into place

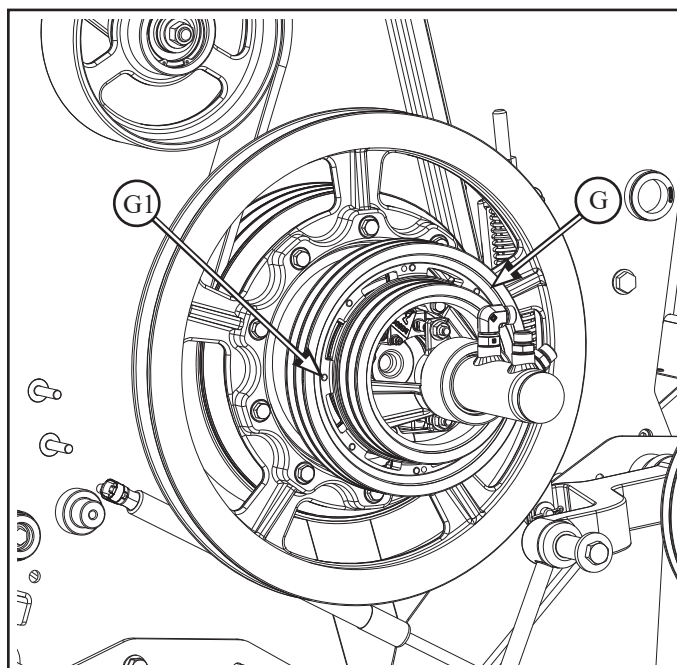
2.2.5.3 Reinstall nut (**P1**), Belleville washer (**P2**), flatwasher (**P3**) and nut (**P4**) x2 onto shifter studs (**AG2**)
- ensure a gap is left for hyd shifter arm (**N**)



2.2.5.4  Once position has been set, remove spacer (**H**)

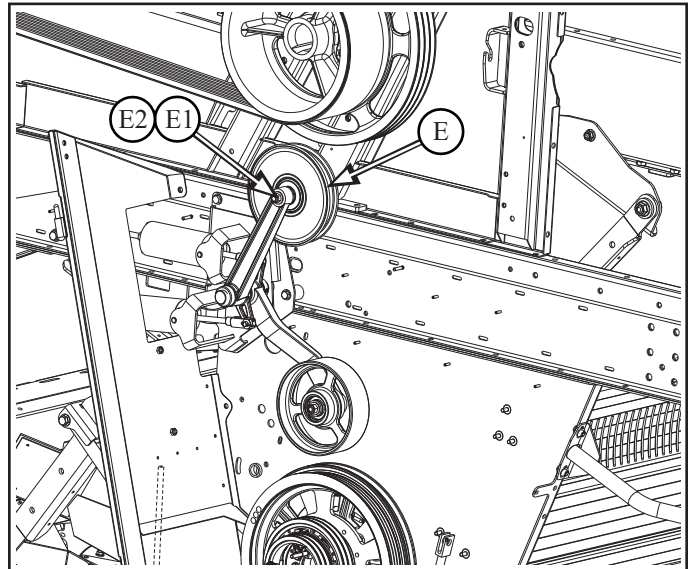
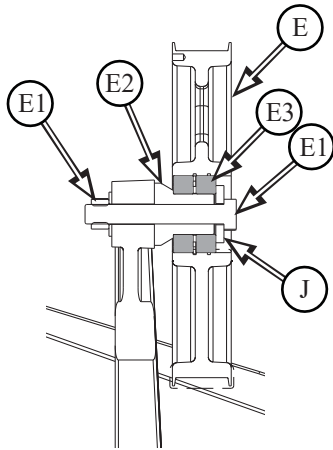
2.2.5.5 Reinstall spreader drive sheave (**G**), with:
- reuse existing hardware (**G1**) x8

2.2.5.6 Do not install hyd lines or belts at this time



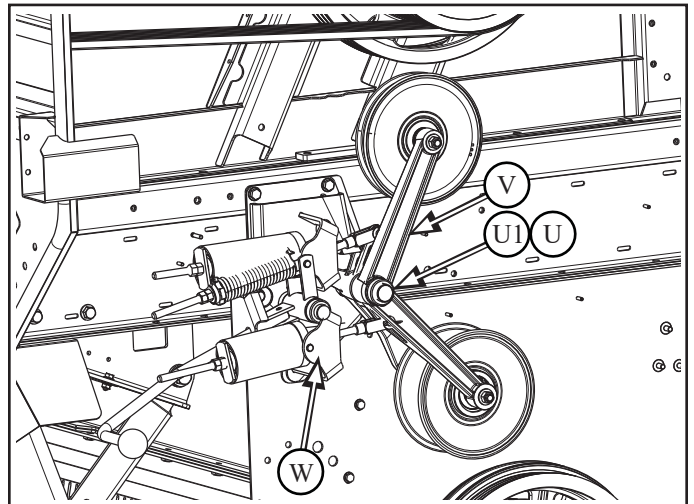
2.2.6 Install new idler (E) onto upper idler arm, with:

- Note: bearings (E3) in idler are offset, install idler with bearings closest to idler arm
- insert bushing (E2) into idler with head against idler arm
- new idler spacer (J)
- reuse existing hardware (E1)



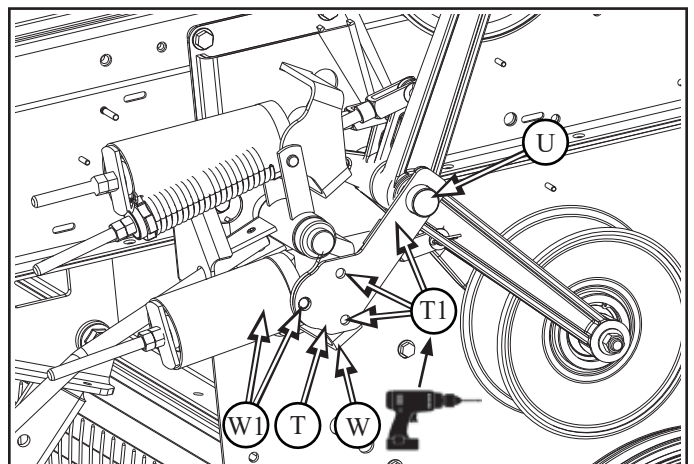
2.2.7 Install tension rod support bracket - 8000 Series only

- #### 2.2.7.1
- Remove locking collar (U1) securing belt tensioner arm (V) on shaft (U)
- to be reinstalled



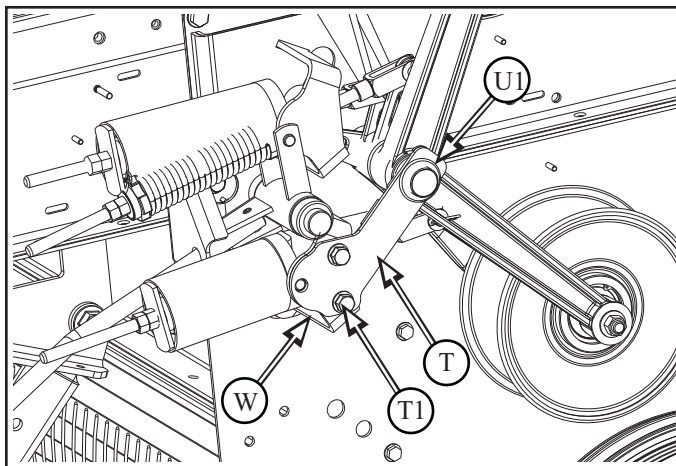
- #### 2.2.7.2
- Place tension rod support bracket (T) onto shaft (U) and over bolt (W1) on tensioner mount bracket (W)

- #### 2.2.7.3
- Drill 10.5mm (27/64 in) hole (T1) x2 thru tensioner mount bracket (W) using support bracket (T) as drill jig



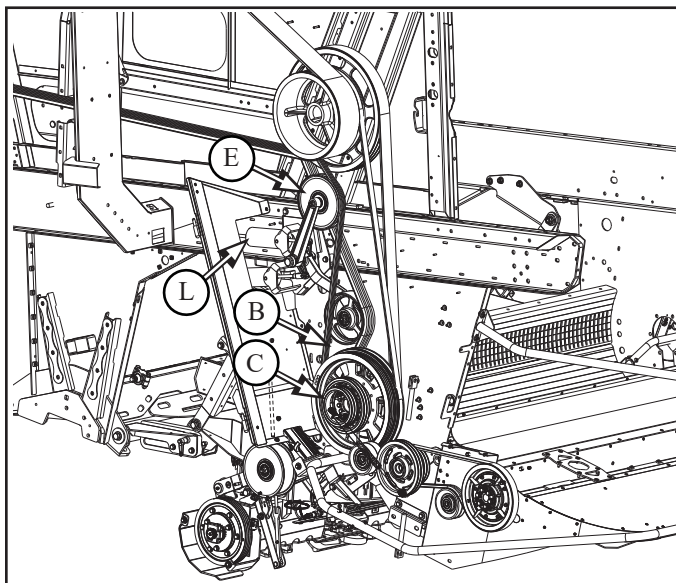
2.2.7.4 Secure tension rod support bracket (**T**) to shaft and tensioner mount bracket (**W**), with:
- M10 x 25 flange head bolt and flange nut (**T1**) x2 thru holes just drilled

2.2.7.5 Reinstall locking collar (**U1**)

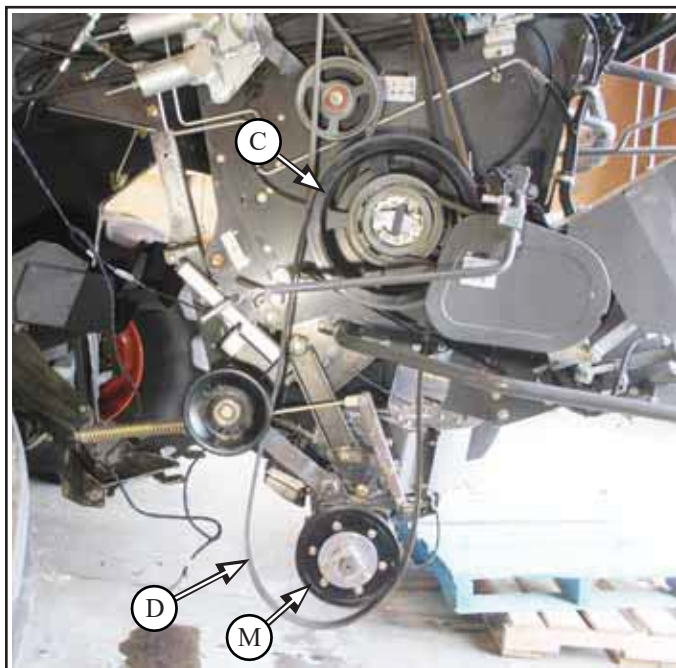


2.2.8 Install chopper drive belt BE3M143K (**B**) onto inner grooves on sheave (**C**) around new tensioner idler (**E**)

2.2.8.1 Tension drive belt (**B**) with tensioner (**L**)



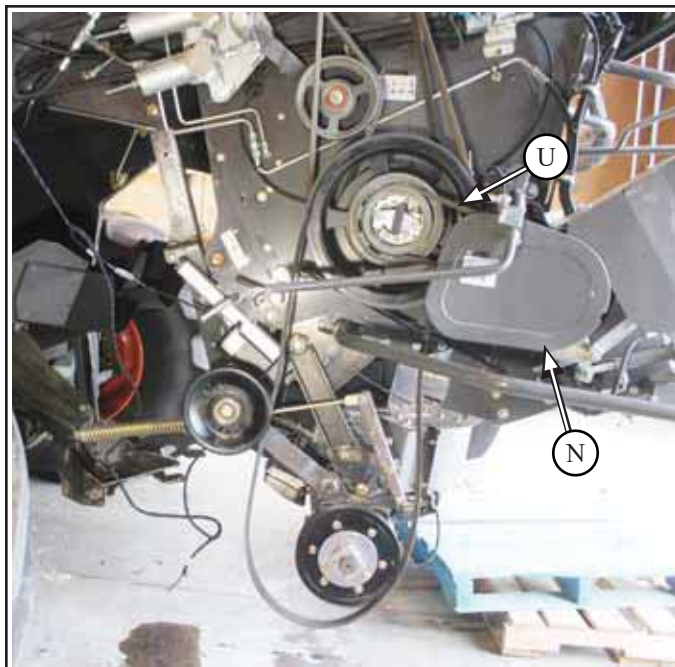
2.2.9 Install SCU drive belt BE4M119K (**D**) onto outer grooves of sheave (**C**) down to SCU drive sheave (**M**)



2.2.10 Chopper Belt Tensioner Modifications

2.2.10.1 Remove drive shield (N)

- to be reinstalled

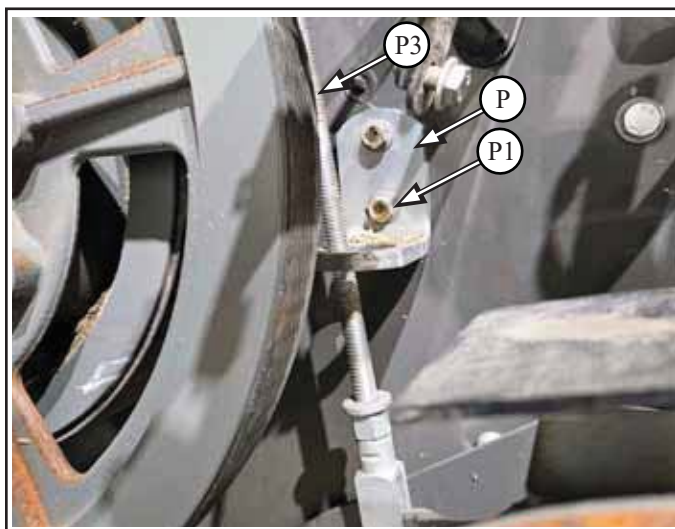
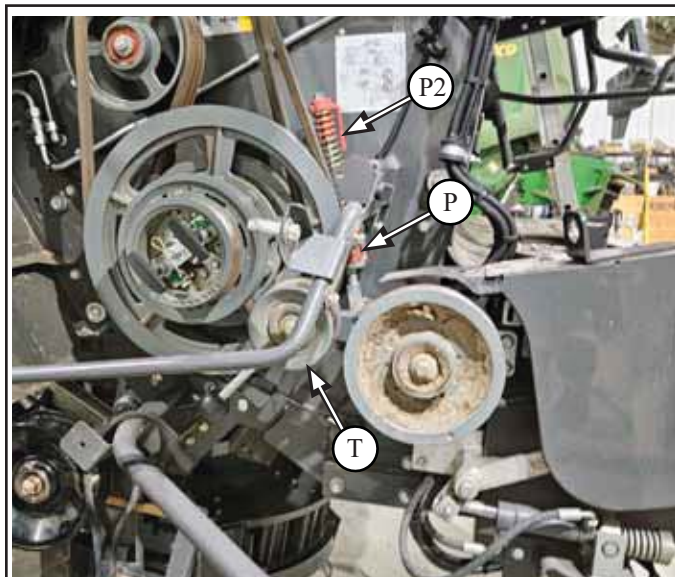


2.2.10.3 Remove OEM tensioner spring and indicator (P2) from spring tensioner rod (P3)

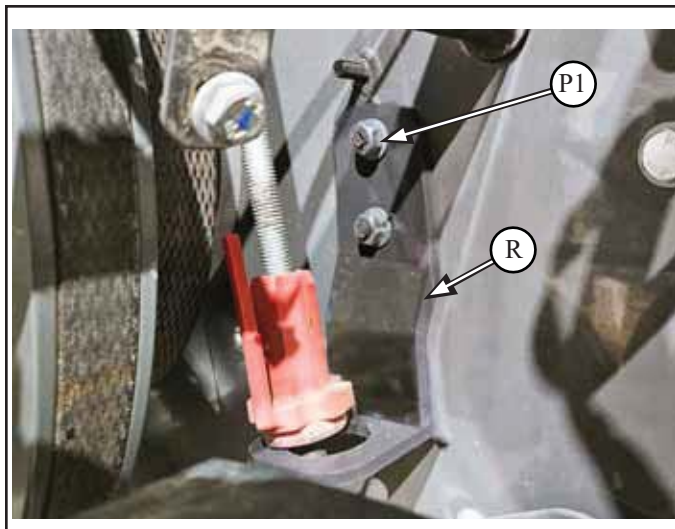
- to be reinstalled

2.2.10.4 Remove OEM spring tensioner bracket (P)

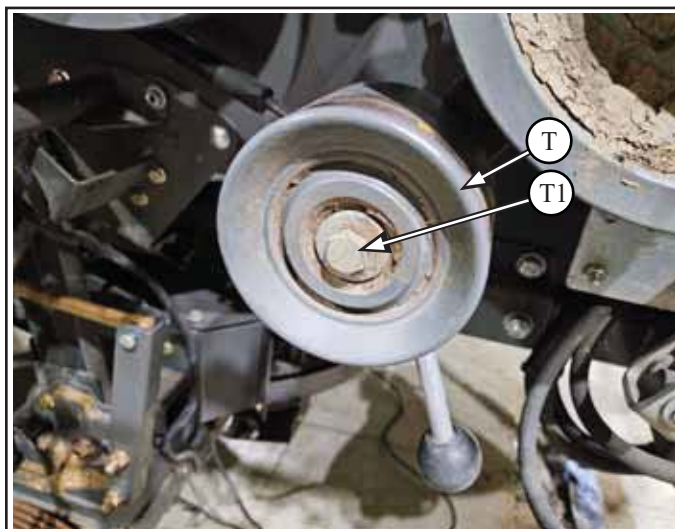
- not to be reused
- nuts (P1) x2 to be reused



2.2.10.5 Install new spring tensioner bracket (**R**) in place of the one (**P**) just removed, with:
- reuse nuts (**P1**) x2



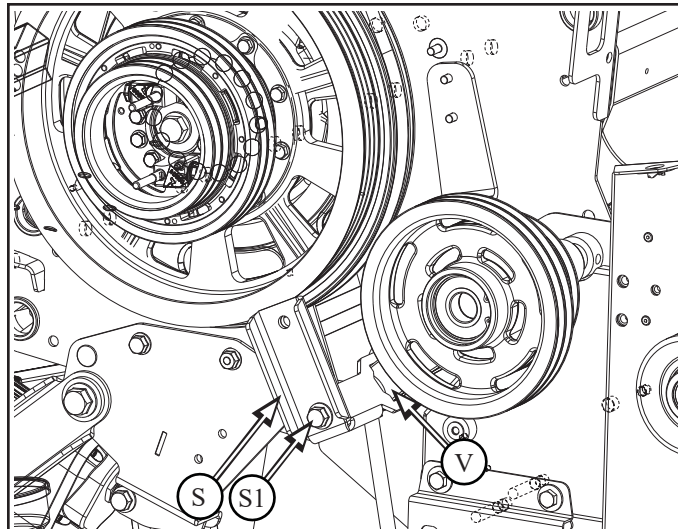
2.2.10.6 Remove belt tensioner (**T**) from arm (**U**)
- tensioner and hardware (**T1**) to be reused



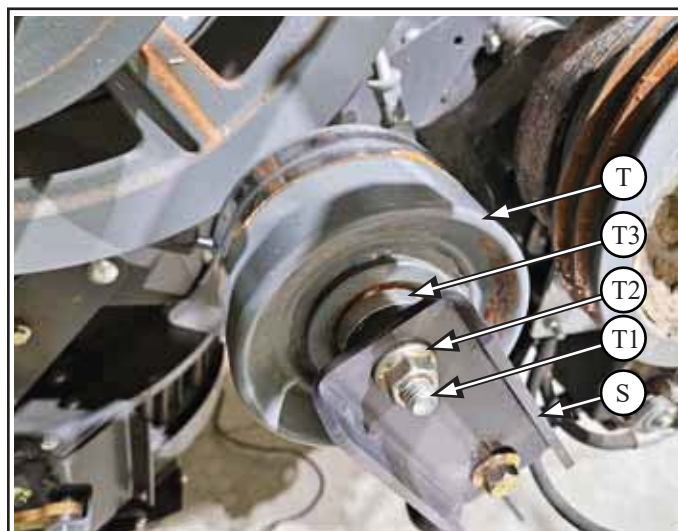
2.2.10.6.1 View with removed belt tensioner (**T**) from arm (**V**)



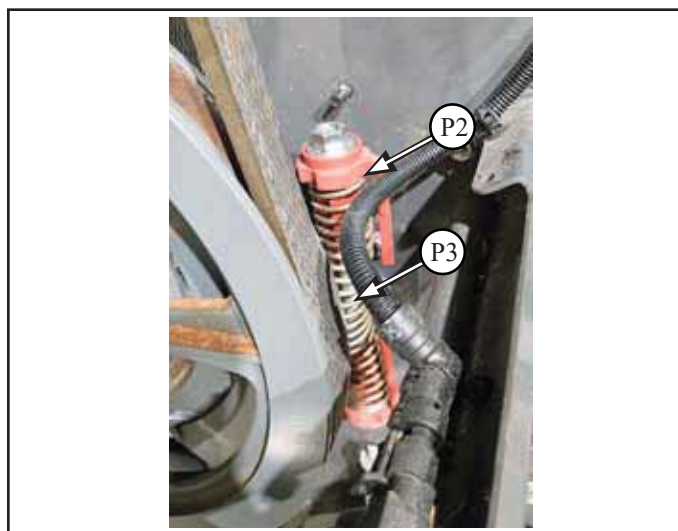
- 2.2.10.7** Install new belt tensioner offset bracket (**S**) on to arm (**V**), with:
- M12 x 120 flange head bolt (**S1**)



- 2.2.10.8** Install belt tensioner (**T**) on to offset bracket (**S**), with:
- reuse mount hardware (**T1**) and new flange nut (**T2**)
 - ensure spacer (**T3**) is facing bracket (**S**)



- 2.2.10.9** Reinstall OEM tensioner spring and indicator (**P2**) to spring tensioner rod (**P3**)
- do not tension at this time



2.2.10.10 Reinstall drive belt (U)



2.2.10.11 Tension OEM tensioner spring and indicator (P2) to indicator marks

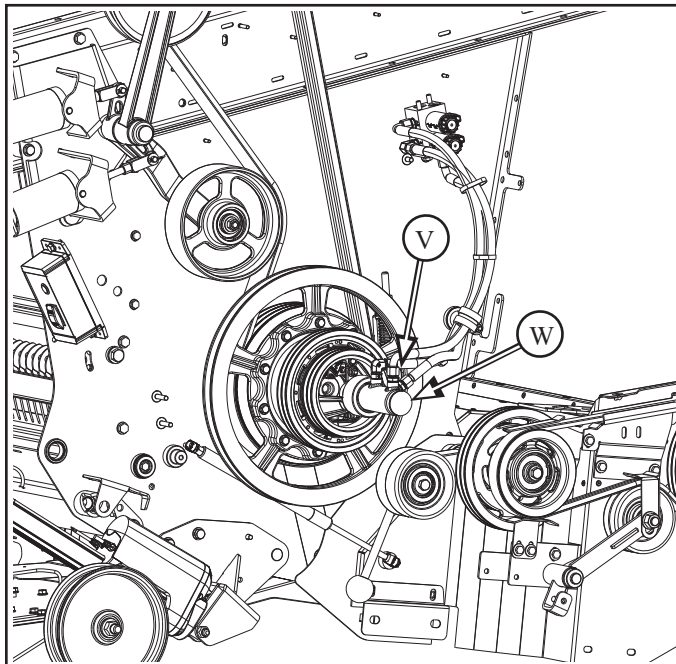


2.2.10.11.1 View with relocated belt tensioner and tensioned drive belt



Hydraulic Shifter

2.2.11 Reinstall hydraulic hoses (**V**) x3 to matching fittings on motor (**W**) as labeled previously



2.2.12 Remove handle (**P**) from slow speed adjustment
- to provide clearance to drive belt
- store with combine for future use

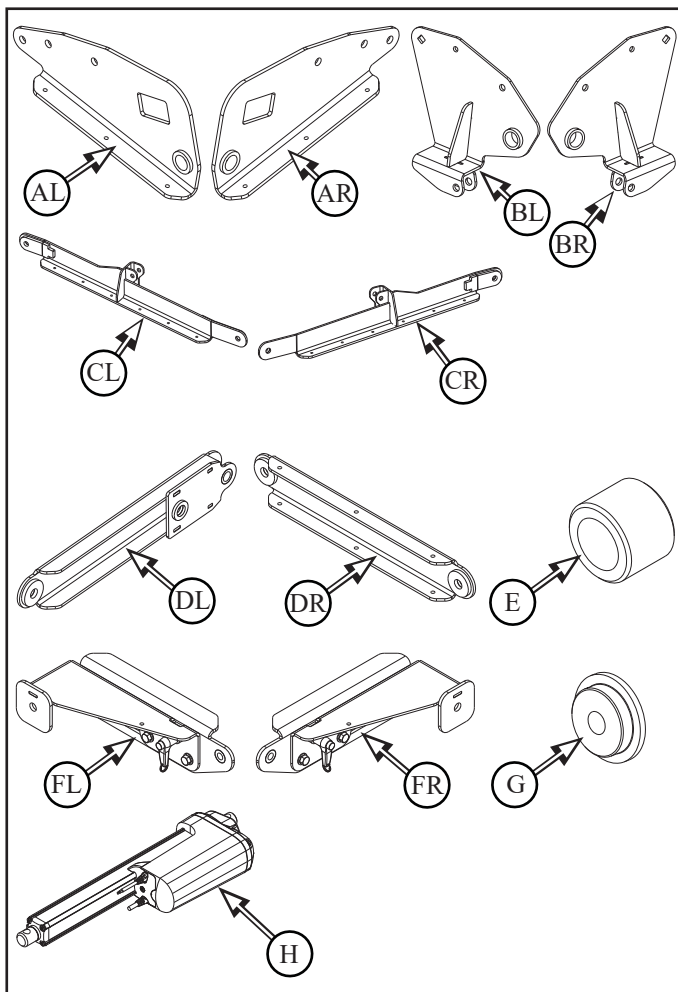


2.3 SCU Linkage and SCU Installation - 8000 Series

2.3.1 Linkage Installation - 8000 Series

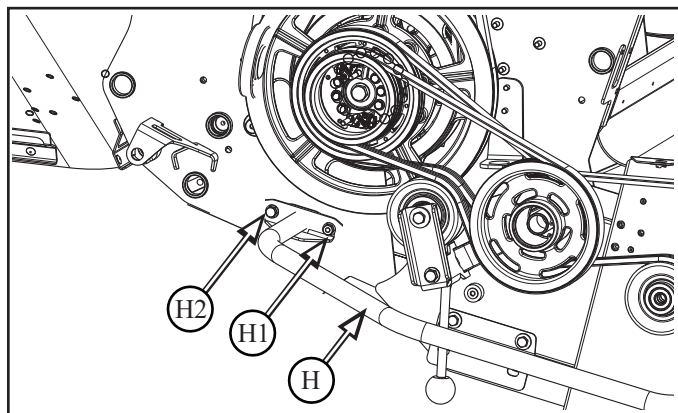
Parts List:

SC507CL	Link Mnt Front SCU Support Lt (AL)	Qty 1
SC507CR	Link Mnt Front SCU Support Rt (AR)	Qty 1
SC512CL	Link Mnt Bottom SCU Claas Lt (BL)	Qty 1
SC512CR	Link Mnt Bottom SCU Claas Rt (BR)	Qty 1
SC1466CL	Link Mnt Front SCU Support Lt (CL)	Qty 1
SC1466CR	Link Mnt Front SCU Support Rt (CR)	Qty 1
SC539C	Link Support Rear SCU Claas Lt (DL)	Qty 1
SC524C	Link Support Rear Claas SCU Rt (DR)	Qty 1
SC523Z	Bushing Link SCU Mount (E)	Qty 8
SC528CAL	Link Position SCU Assy Lt (FL)	Qty 1
SC528CAR	Link Position SCU Assy Rt (FR)	Qty 1
SC527Z	Bushing Link SCU Position (G)	Qty 2
RP827	Linear Actuator (H)	Qty 2
- SC513S	Hardware Bag	



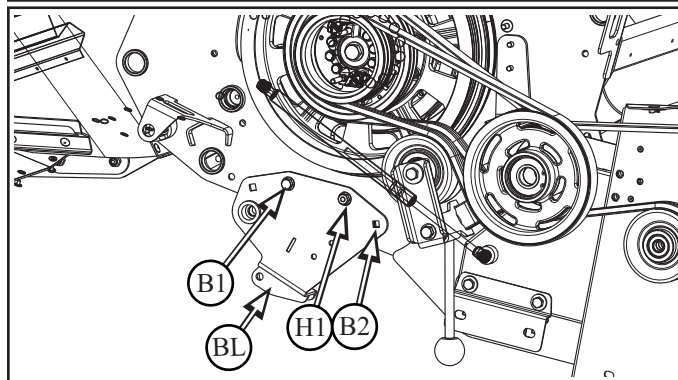
2.3.1.1 Disconnect guardrail (**H**) from left bottom of chopper

- to be reinstalled (at the very end of installation)
- nut and washer (**H1**) to be reused
- hardware (**H2**) not to be reused



2.3.1.1.1 Install left bottom mount link (**BL**) onto bottom of chopper, with:

- reuse nut and washer (**H1**) on stud
- new M10 x 30 flange head bolt (**B1**)
- new M10 x 30 round head bolt (**B2**)
- hardware (**B1 & H1**) to be removed and reused when guardrail is reinstalled



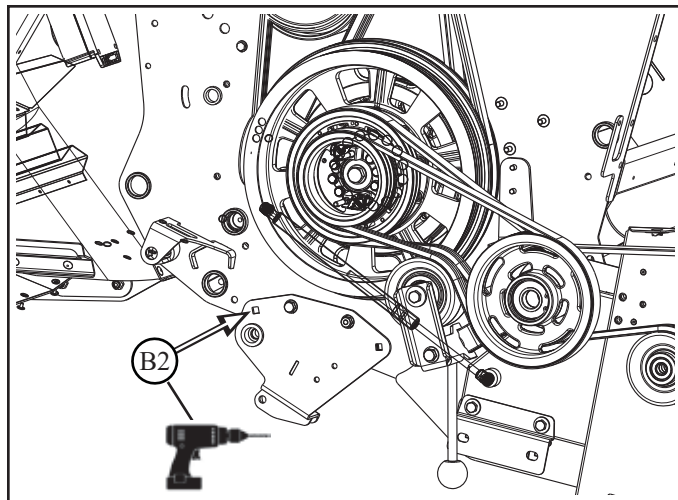
2.3.1.1.2 Repeat for right side

2.3.1.2.1 Drill 10mm hole (B2)

- use hole in mount plate to drill through chopper side wall

2.3.1.2.1.1 Install M10 x 30 flange head bolt and flange nut (B2) through plate (CL) and hole

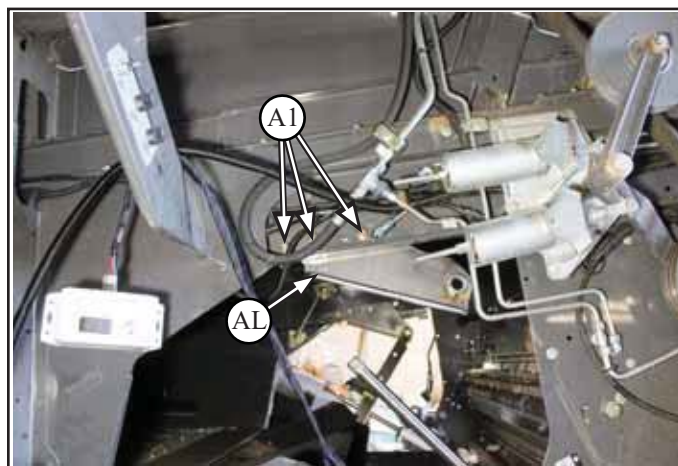
2.3.1.2.1.2 Repeat for right side



2.3.1.3 Install left SCU front support link (AL) onto inside of combine in front of the chopper, with:

- M12 x 30 flange bolt and flange nut (A1) x3

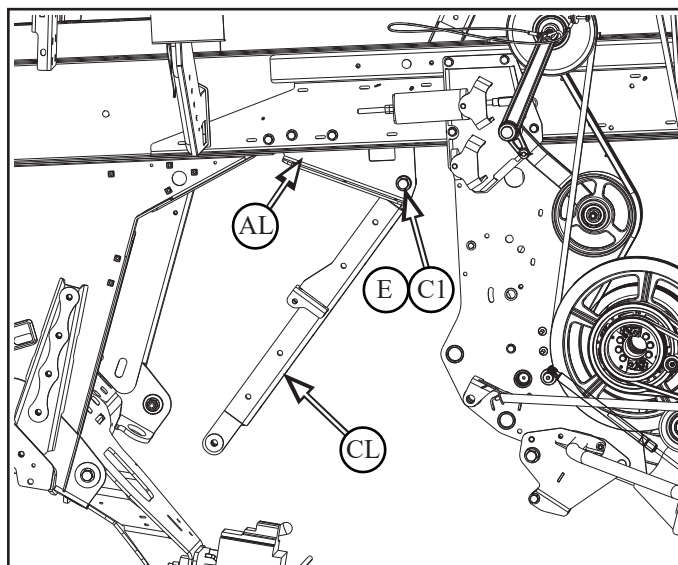
2.3.1.3.1 Repeat for right side



2.3.1.4 Install left front link support (CL) onto left SCU front support link (AL), with:

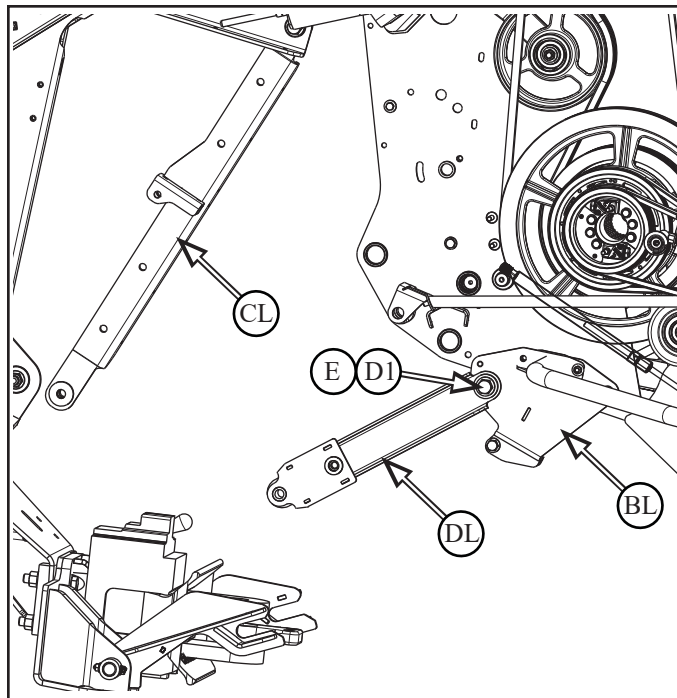
- Bushing (E)
- M16 x 60 flange head bolt and lock nut (C1)

2.3.1.4.1 Repeat for right side



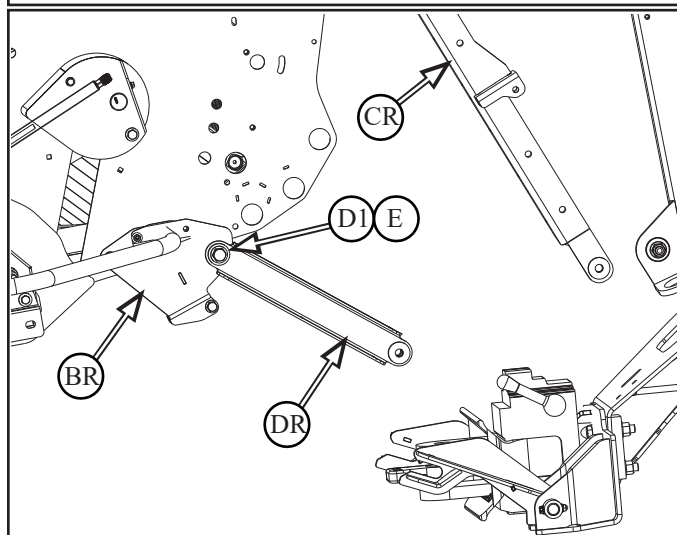
2.3.1.5 Install left bottom rear link support (**DL**) onto bottom link mount (**BL**), with:

- Bushing (**E**)
- M16 x 60 flange head bolt, flat washer and lock nut (**D1**)



2.3.1.6 Install right bottom rear link support (**DR**) onto bottom link mount (**BR**), with:

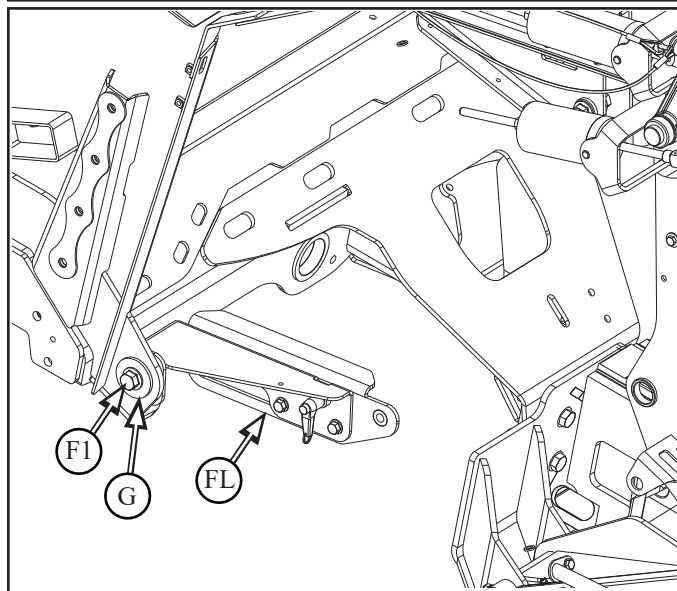
- Bushing (**E**)
- M16 x 60 flange head bolt, flat washer and lock nut (**D1**)



2.3.1.7 Install left SCU position assembly (**FL**) onto left rear of combine, with:

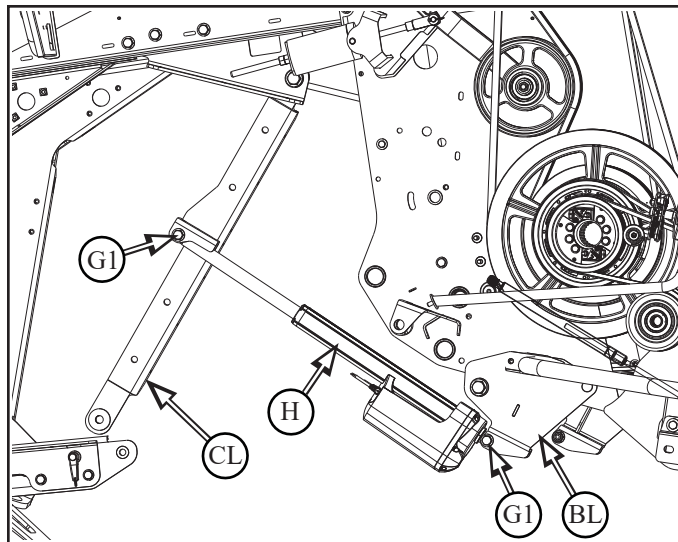
- Bushing (**G**)
- M16 x 60 flange head bolt, lock nut (**F1**)

2.3.1.7.1 Repeat for right side



2.3.1.8 Install left actuator (**H**) onto left linkages (**CL** & **BL**), with:
 - M12 x 60 flange head bolt and lock nut (**G1**) x2

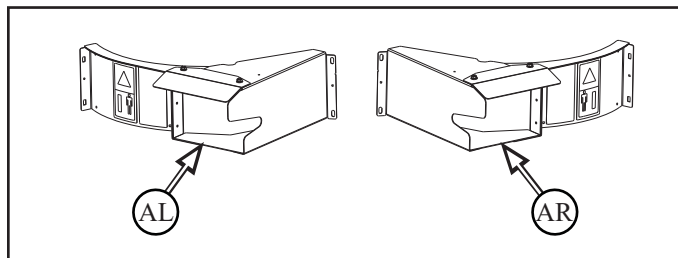
2.3.1.8.1 Repeat for right side



2.3.2 Discharge Outlet Installation

Parts List:

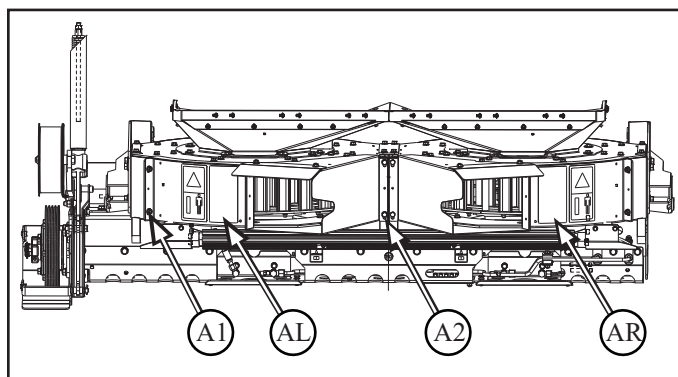
SC181CAL	Outlet SCU Bypass Assy Lt (AL)	Qty 1
SC181CAR	Outlet SCU Bypass Assy Rt (AR)	Qty 1



2.3.2.1 Install left discharge outlet (**AL**) to rear of SCU, with:

- M8 x 20 round head bolt and flange nut (**A1**) x2
- M8 x 20 flange bolt (**A2**) x2

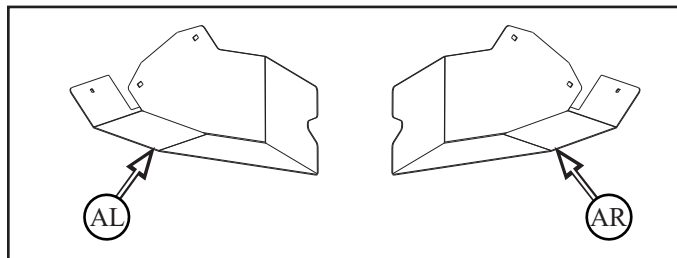
2.3.2.1.1 Repeat for right side



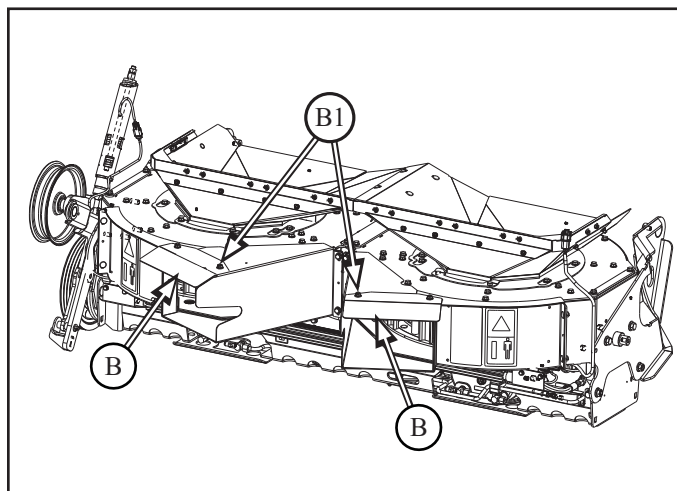
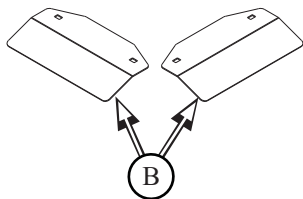
2.3.2.2 Windrow Discharge Deflectors Installation

Parts List:

SC743CL	Chaff Deflector Lt (AL)	Qty 1
SC743CR	Chaff Deflector Rt (AR)	Qty 1
- SC743S	Hardware Bag	

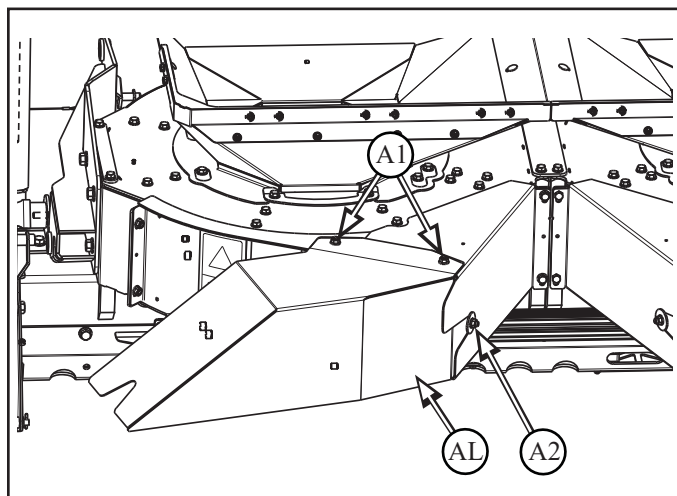


- 2.3.2.2.1** Remove top discharge deflectors (**B**) from discharge chutes
- not to be reused
 - mounting hardware (**B1**) to be reused



- 2.3.2.2.2** Install left chaff deflector (**AL**) to left discharge outlet, with:
- reuse M8 x 20 round head bolt and flange nut (**A1**) x2 through top
 - M8 x 20 round head bolt, flat washer and flange nut (**A2**) x1 through side

- 2.3.2.2.3** Repeat for right side

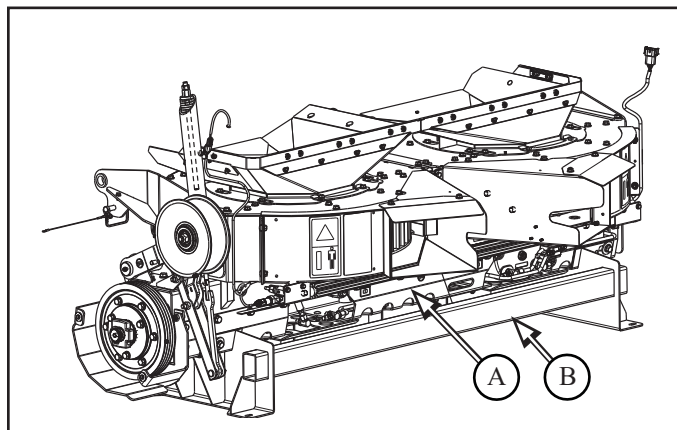


2.3.3 SCU Installation - 8000 Series

Parts List:

SC550CA SCU (A)

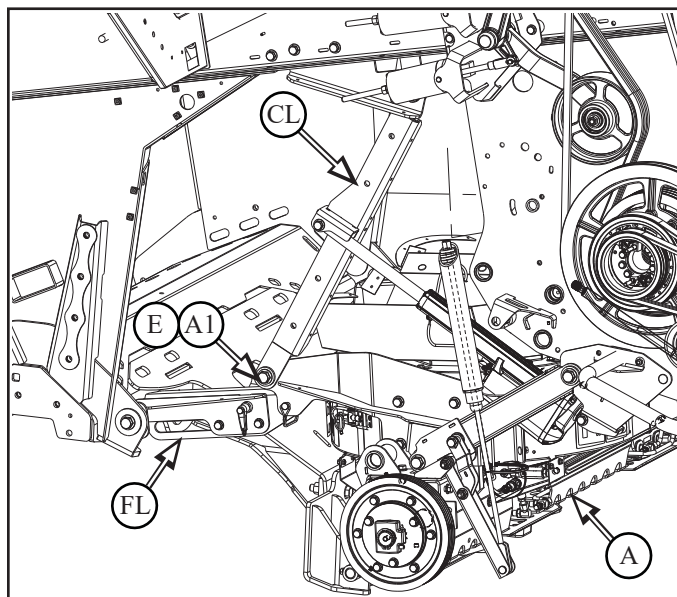
Qty 1



2.3.3.1 With SCU mounted on the service frame (B), lift SCU (A) up into position with a forklift using extended forks

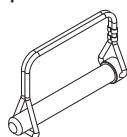
2.3.3.2 Connect left front support link (CL) to SCU sideplate with:
- Bushing (E)
- M16 x 60 flange head bolt, flat washer and lock nut (A1)

2.3.3.2.1 Repeat for right side

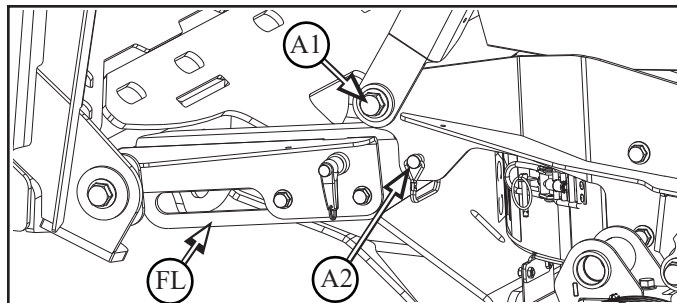


2.3.3.3 Connect left position assembly plate (**FL**) to SCU sideplate with:

- pin w/ wire (**A2**)



2.3.3.3.1 Repeat for right side

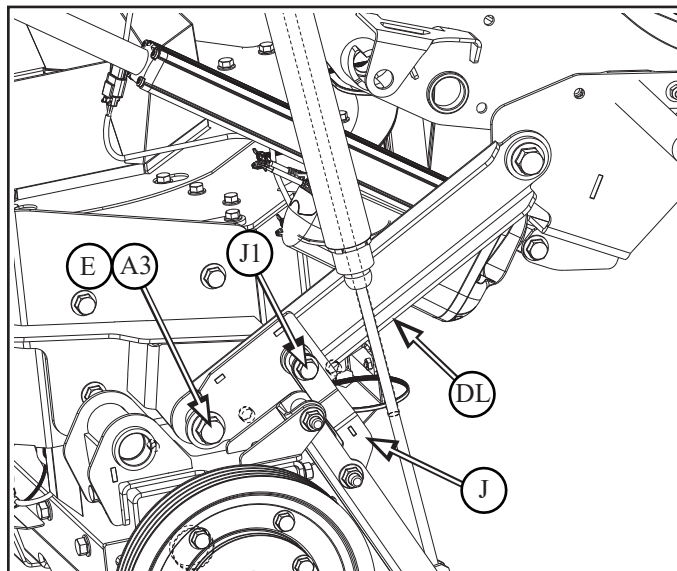


2.3.3.4 Connect left bottom rear link support (**DL**) to SCU sideplate, with:

- Bushing (**E**)
- M16 x 90 flange head bolt, flat washer and lock nut (**A3**)

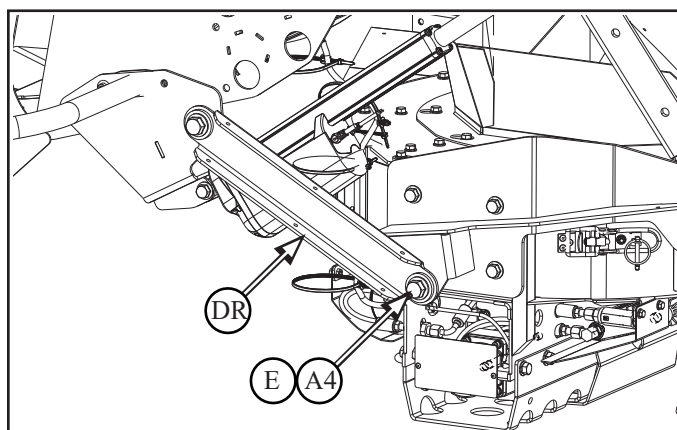
2.3.3.4.1 Connect tension link brace (**J**) to rear link support (**DL**), with:

- M12 x 60 flange head bolt and lock nut (**J1**)



2.3.3.4.2 Connect right bottom rear link support (**DR**) to SCU sideplate, with:

- Bushing (**E**)
- M16 x 60 flange head bolt, flat washer and lock nut (**A4**)



2.3.3.5 Remove service frame (**B**)

SCU installed

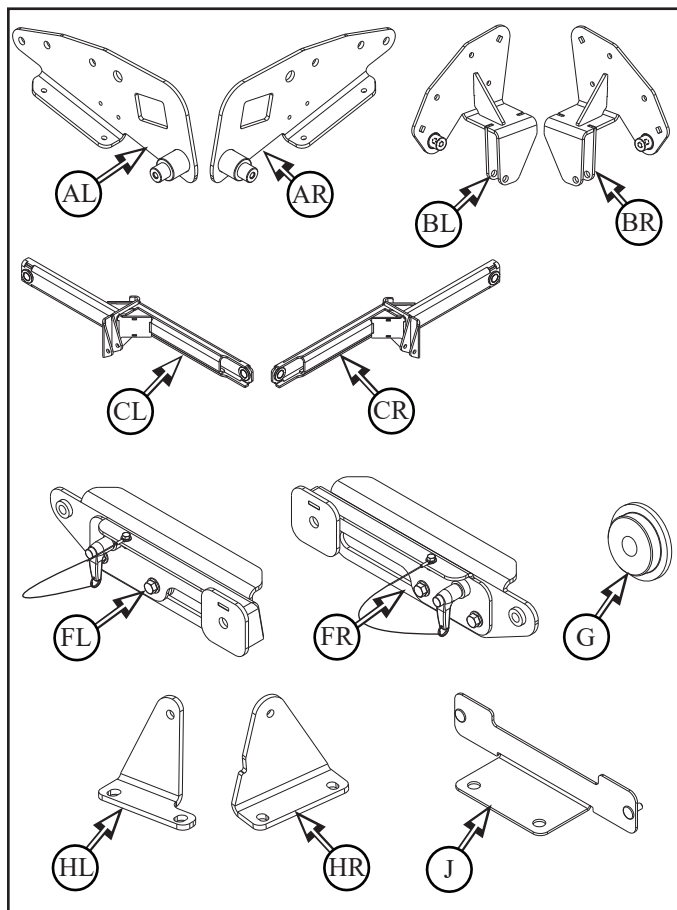


2.4 SCU Linkage and SCU Installation - 7000 Series

2.4.1 Linkage Installation - 8000 Series

Parts List:

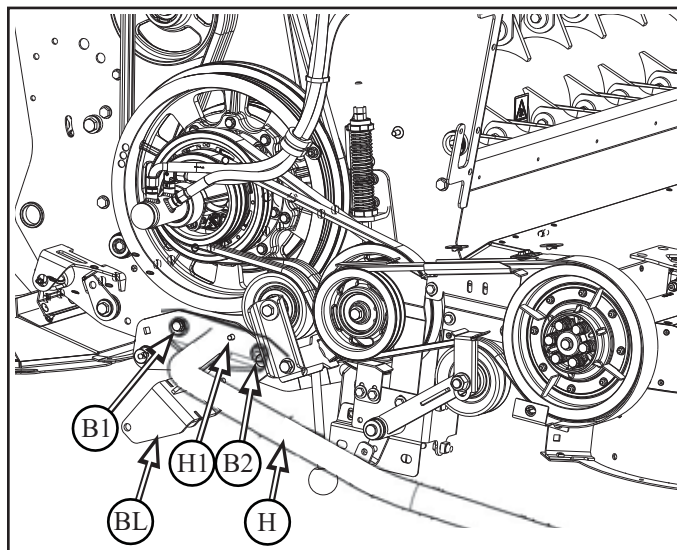
SC848CL	Link Mnt Front SCU Support Lt (AL)	Qty 1
SC848CR	Link Mnt Front SCU Support Rt (AR)	Qty 1
SC903CL	Link Mnt Bottom SCU Claas Lt (BL)	Qty 1
SC903CR	Link Mnt Bottom SCU Claas Rt (BR)	Qty 1
SC1467CAL	Link Mnt Front SCU Support Lt (CL)	Qty 1
SC1467CAR	Link Mnt Front SCU Support Rt (CR)	Qty 1
SC855CAL	Link Position SCU Assy Lt (FL)	Qty 1
SC855CAR	Link Position SCU Assy Rt (FR)	Qty 1
SC527Z	Bushing Link SCU Position (G)	Qty 2
SC1207C	Link Support Bracket Lt (HL)	Qty 1
SC849CR	Link Support Bracket Rt (HR)	Qty 1
SC963C	ECU Mount Bracket 7000S (J)	Qty 1



2.4.1.1 Disconnect guardrail (**H**) from left bottom of chopper
- to be reinstalled

2.4.1.1.1 Install left bottom mount link (**BL**) along with guardrail (**H**) onto bottom of chopper, with:
- reuse nut and washer (**H1**) on stud
- new M10 x 30 flange head bolt (**B1**)
- new M10 x 30 round head bolt (**B2**)

2.4.1.1.2 Repeat for right side

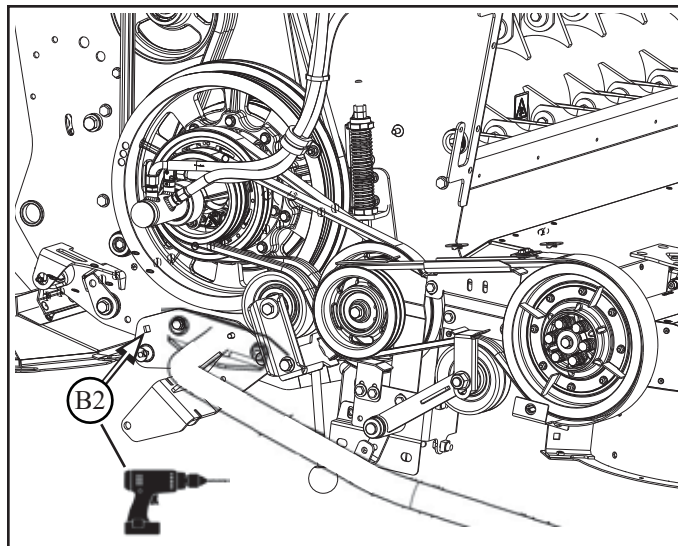


2.4.1.2 Drill 10mm hole (B2)

- use hole in mount plate to drill through chopper side wall

2.4.1.2.1 Install M10 x 30 flange head bolt and flange nut (B2) through plate (CL) and hole

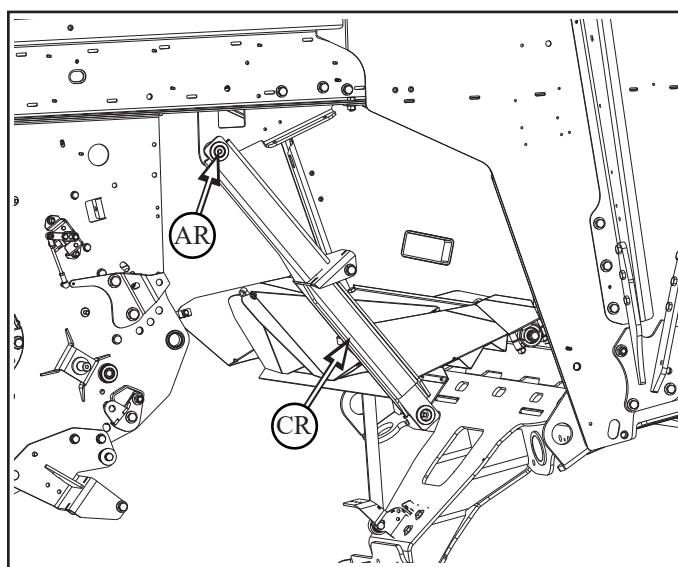
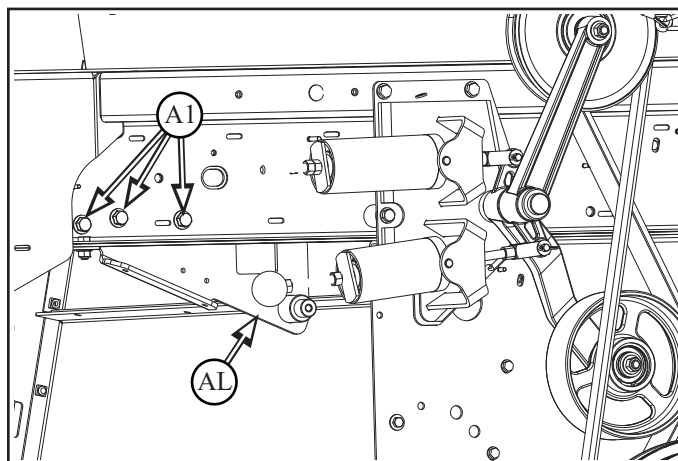
2.4.1.2.2 Repeat for right side



2.4.1.3 Install left SCU front support link (AL) onto inside of combine in front of the chopper, with:

- M12 x 30 flange bolt and flange nut (A1) x3

2.4.1.3.1 Repeat for right side

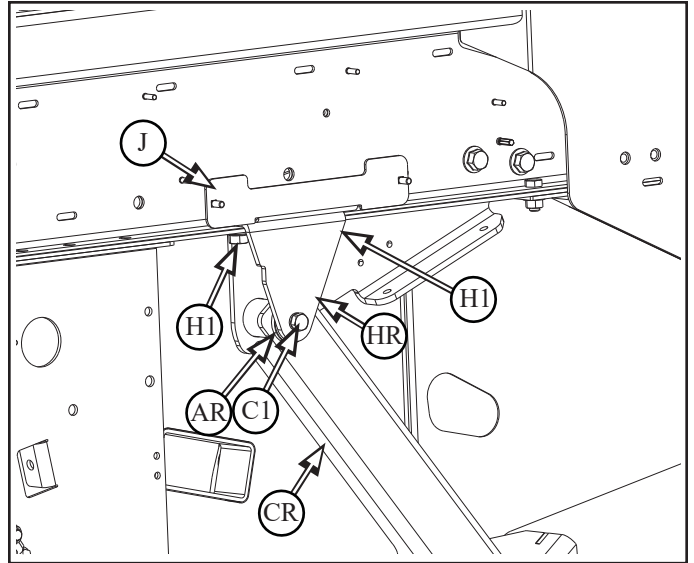


2.4.1.4 Install right support link bracket (**HR**) onto upper right combine ledge aligned with support link pin (**AR**), with:

- M10 x 20 hex head bolt and lockwasher (**C1**)

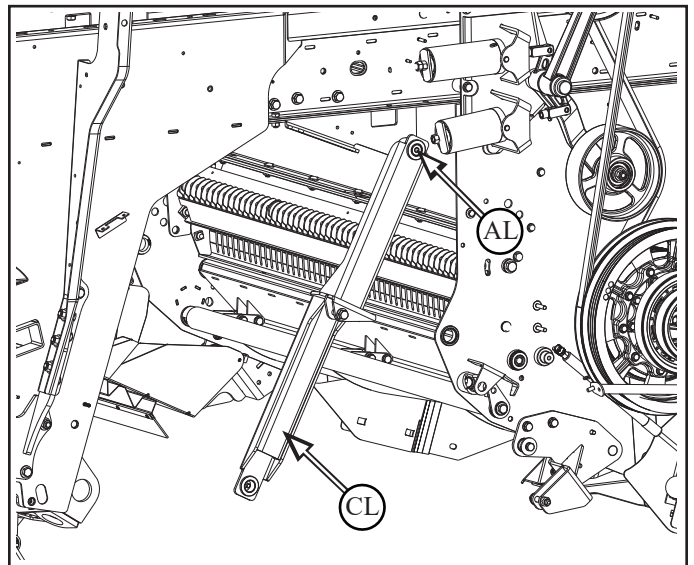
2.4.1.5 Install ECU mount bracket (**J**) on top of right support link bracket (**HR**), with:

- M12 x 35 flange head bolt and flange nut (**H1**) x2



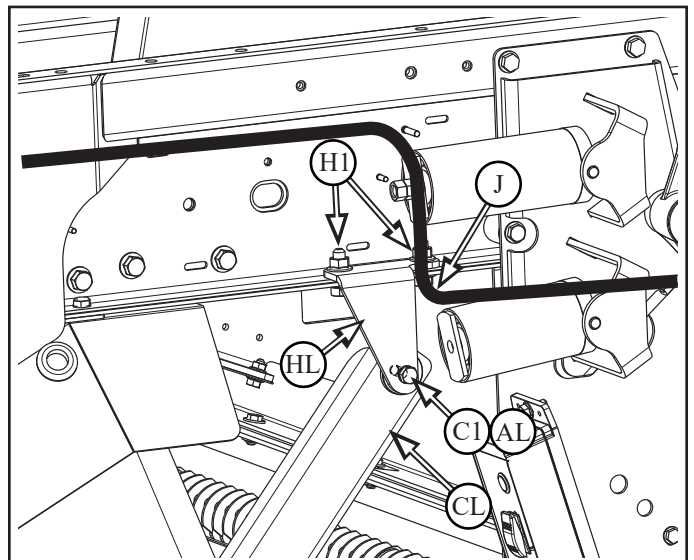
2.4.1.6 Slide left front link support (**CL**) onto left SCU front support link pin (**AL**)

- ensure bushing is in support



2.4.1.7 Install left support link bracket (**HL**) onto upper left combine ledge aligned with support link pin (**AL**), with:

- M10 x 20 hex head bolt and lockwasher (**C1**)
- M12 x 35 flange head bolt and flange nut (**H1**) x2

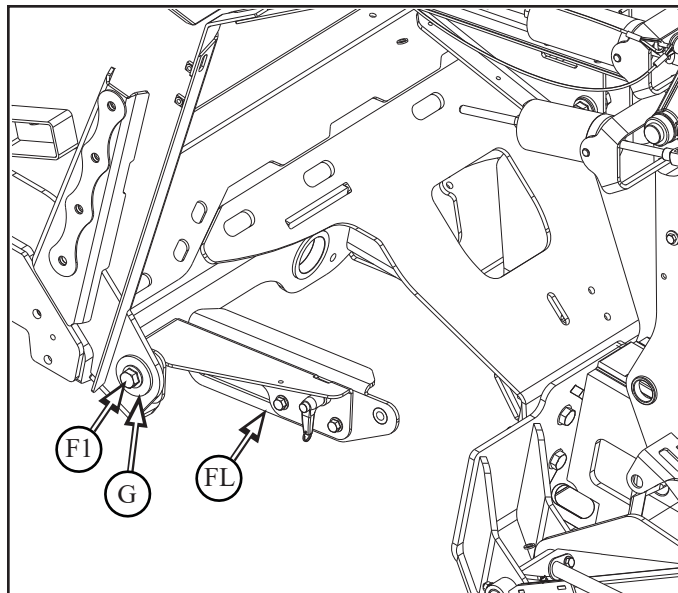


Ensure hyd. line (**J**) doesn't interfere with support link bracket (**HL**)

2.4.1.8 Install left SCU position assembly (**FL**) onto left rear of combine, with:

- Bushing (**G**)
- M16 x 45 flange head bolt, lock nut (**F1**)

2.4.1.8.1 Repeat for right side



2.4.2 Discharge Outlet Installation

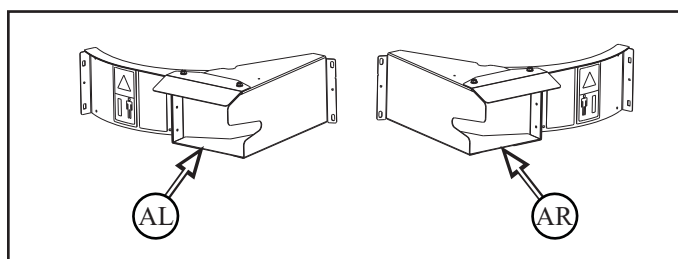
Parts List:

SC181CAL Outlet SCU Assy Lt (**AL**)

SC181CAR Outlet SCU Assy Rt (**AR**)

Qty 1

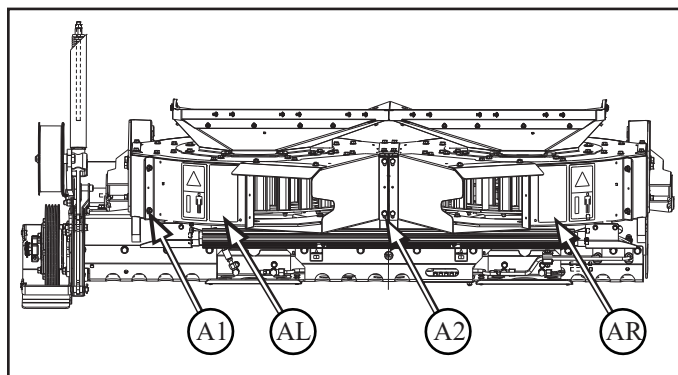
Qty 1



2.4.2.1 Install left discharge outlet (**AL**) to rear of SCU, with:

- M8 x 20 round head bolt and flange nut (**A1**) x2
- M8 x 20 flange bolt (**A2**) x2

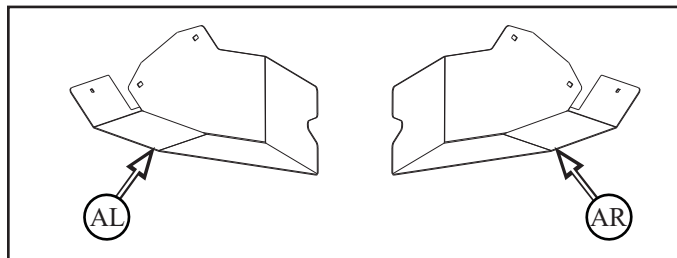
2.4.2.1.1 Repeat for right side



2.4.2.2 Windrow Discharge Deflectors Installation

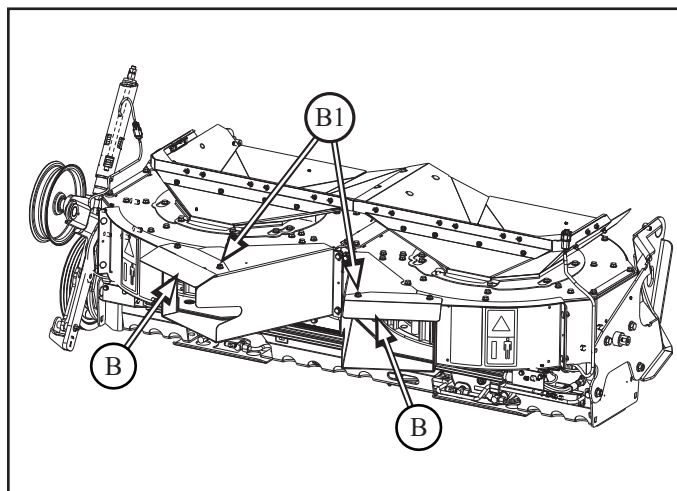
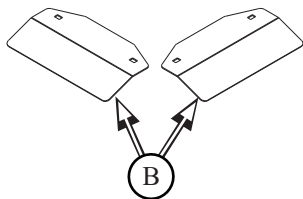
Parts List:

SC743CL	Chaff Deflector Lt (AL)	Qty 1
SC743CR	Chaff Deflector Rt (AR)	Qty 1
- SC743S	Hardware Bag	



2.4.2.2.1 Remove top discharge deflectors (**B**) from discharge chutes

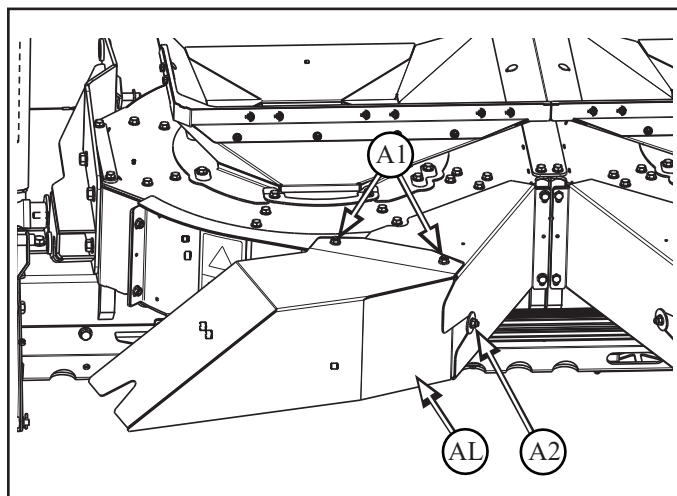
- not to be reused
- mounting hardware (**B1**) to be reused



2.4.2.2.2 Install left chaff deflector (**AL**) to left discharge outlet, with:

- reuse M8 x 20 round head bolt and flange nut (**A1**) x2 through top
- M8 x 20 round head bolt, flat washer and flange nut (**A2**) x1 through side

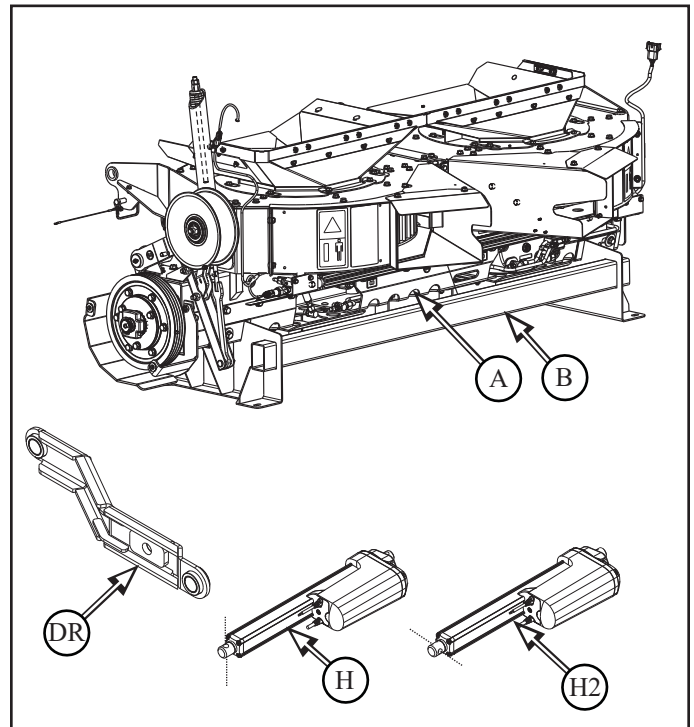
2.4.2.2.3 Repeat for right side



2.4.3 SCU Installation - 7000 Series

Parts List:

SC550CA	SCU (A)	Qty 1
SC841CA	Link Support Rear SCU Claas Rt (DR)	Qty 1
RP827	Actuator (H)	Qty 1
RP827	Actuator(hole rotated 90 degrees) (H2)	Qty 1

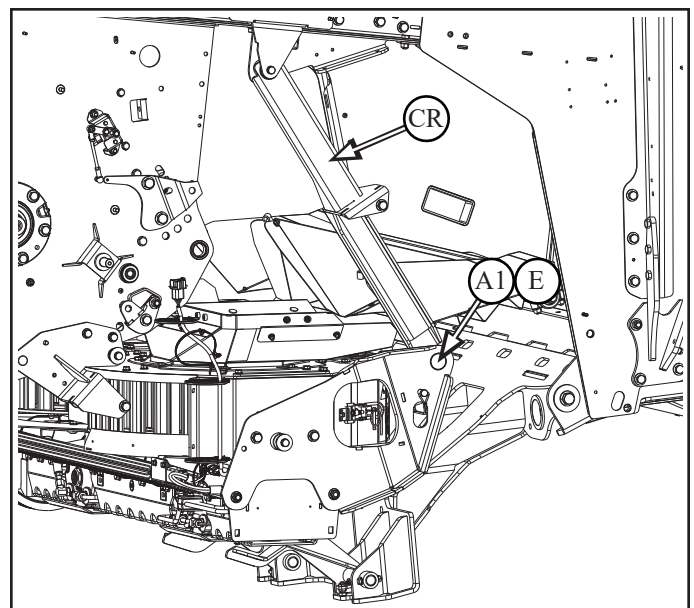


2.4.3.1 With SCU mounted on the service frame (B), lift SCU (A) up into position with a forklift using extended forks

2.4.3.2 Connect right front support link (CR) to SCU sideplate with:

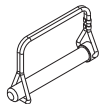
- Bushing (E)
- M10 x 20 hex head bolt, lock washer and flat washer (A1)

2.4.3.2.1 Repeat for left side

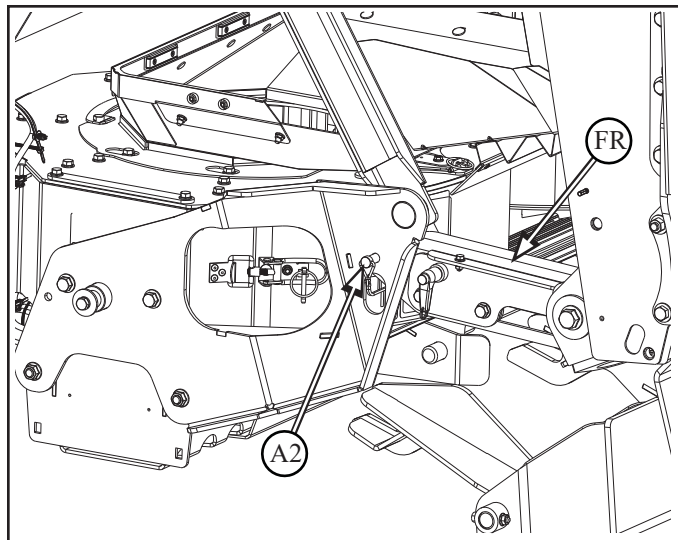


2.4.3.3 Connect right position plate assembly (**FR**) to SCU sideplate with:

- pin w/ wire (**A2**)

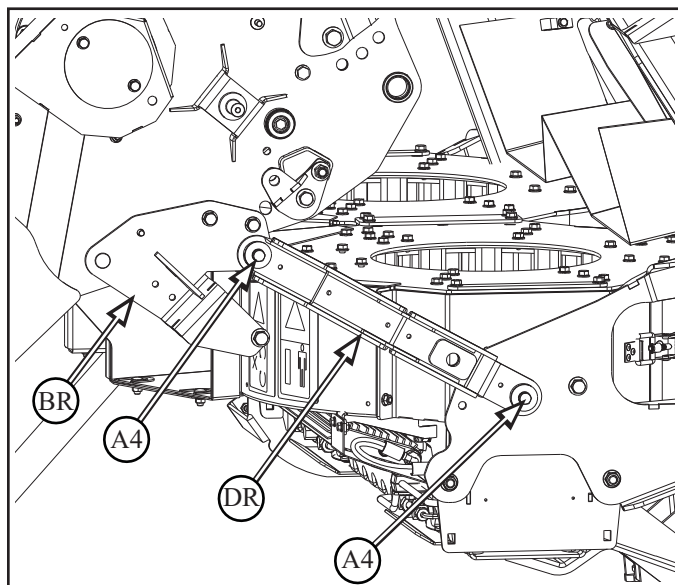


2.4.3.3.1 Repeat for left side

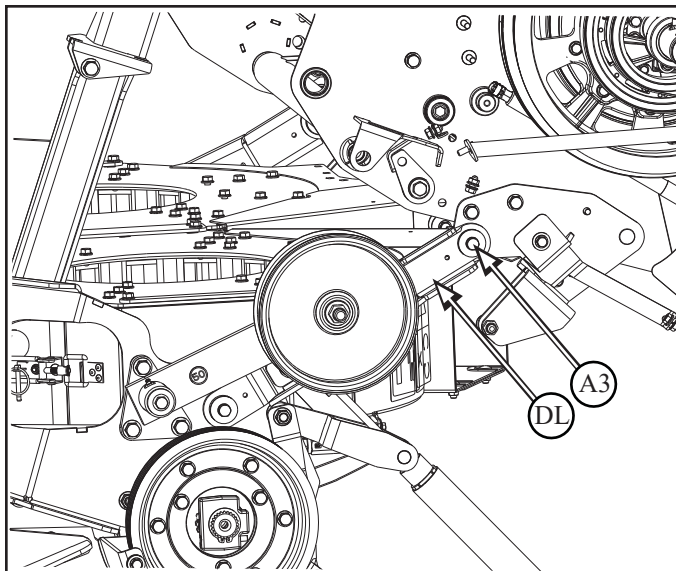


2.4.3.4 Install right bottom rear support link (**DR**) to SCU sideplate and right chopper bottom link (**BR**), with:

- M10 x 20 hex head bolt, flat washer and lock washer (**A4**) x2

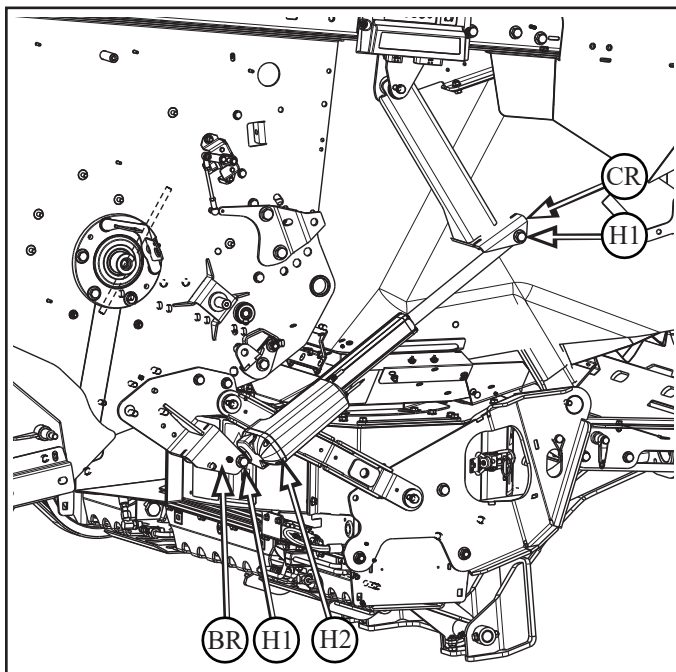


- 2.4.3.5** Connect left bottom rear link support (**DL**) to chopper sideplate, with:
- M16 x 90 flange head bolt, flat washer and lock nut (**A3**)



- 2.4.3.6** Install actuator (**H2**) onto right chopper bottom link (**BR**) and SCU front link (**CR**), with:
- M12 x 60 flange head bolt and lock nut (**H1**) x2
 - ensure motor is positioned outwards

2.4.3.6.1 Repeat for left side



- 2.4.3.7** Remove service frame (**B**)

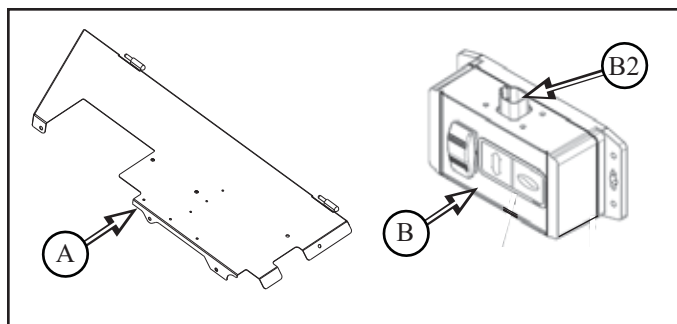
2.5 Switch Box Installation

Parts List:

SC546C Chopper Drive Shield (A)
RP1348A Switch Box (B)

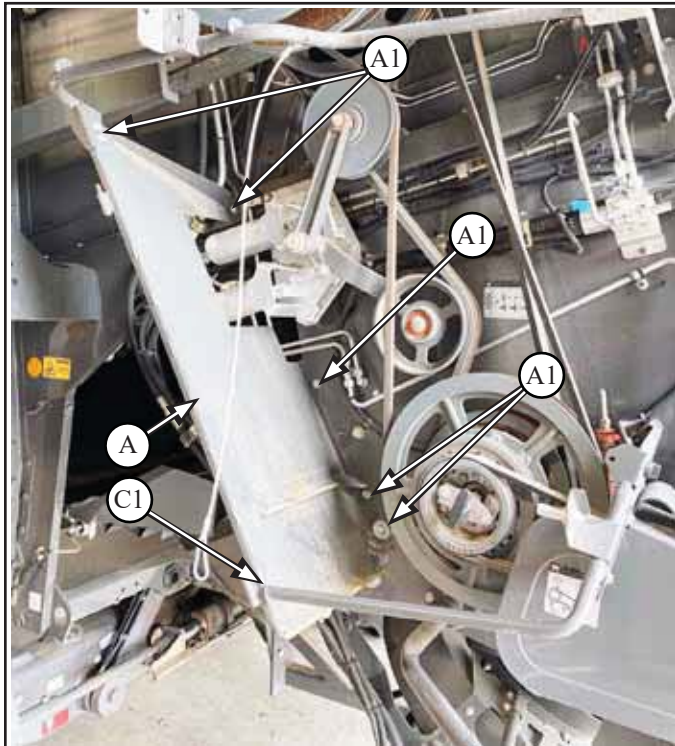
Qty 1

Qty 1



2.5.1 Install front chopper drive shield (A) to combine wall and guards, with:

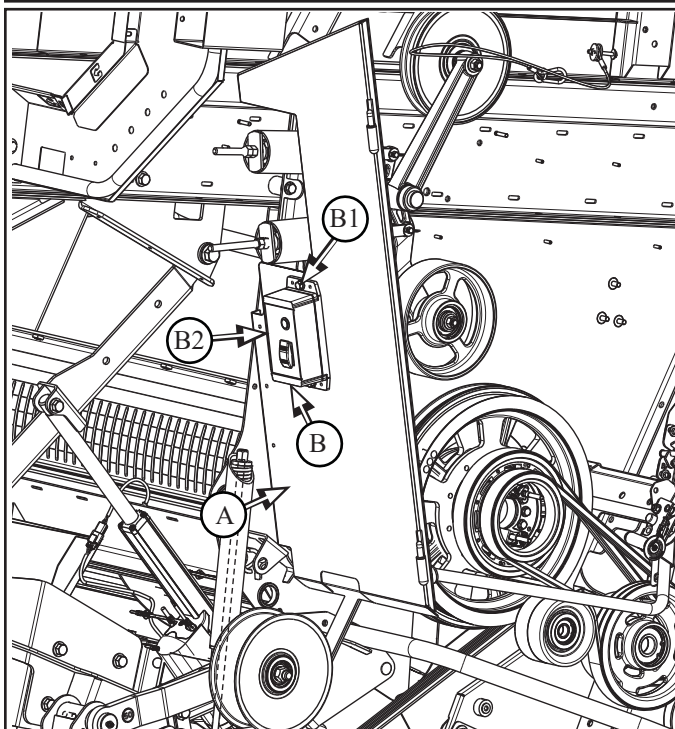
- reuse existing hardware (A1) x5
- bolt (C1) to be installed in a later step



2.5.2 Install switch box (B) to front chopper drive shield (A), with:

- M8 x 20 flange head bolt (B1) x2

2.5.2.1 Ensure connector (B2) is pointed towards the combine body once switchbox is installed

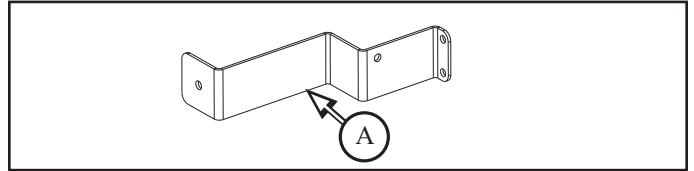


2.6 Speed Sensor and Mount Installation

8000S:

Parts List:

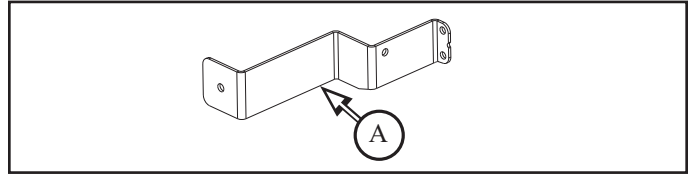
SC580C Shield Mount Bracket 8S (A) Qty 1



7000S:

Parts List:

SC958C Shield Mount Bracket 7S (A) Qty 1



Common Parts:

Parts List:

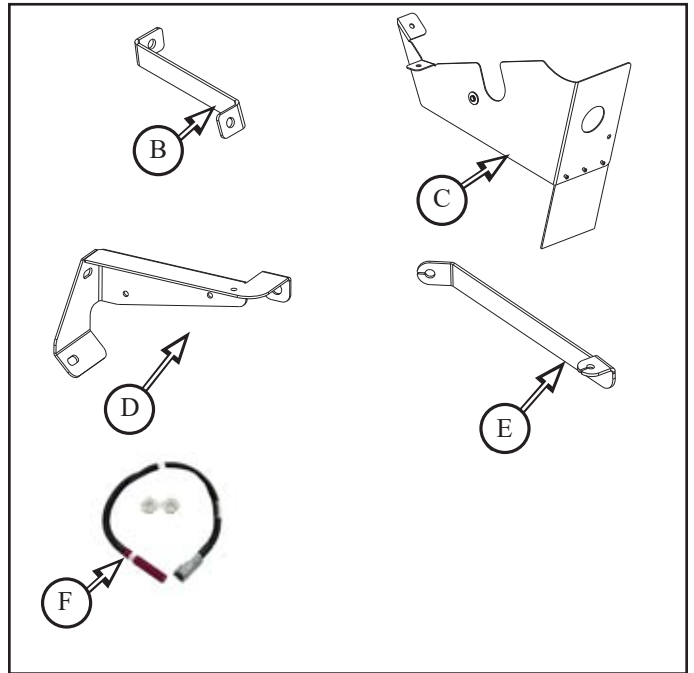
SC574C Shield Mount Bracket (B) Qty 1

SC570CA Shield SCU Stationary Assy (C) Qty 1

SC1268C Speed Sensor Mount Bracket (D) Qty 1

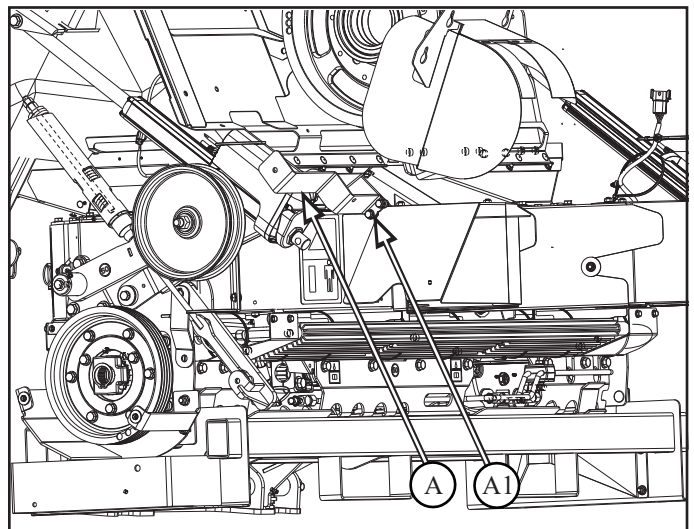
SC1350C Brace (E) Qty 1

SC1124 Speed Sensor (F) Qty 1

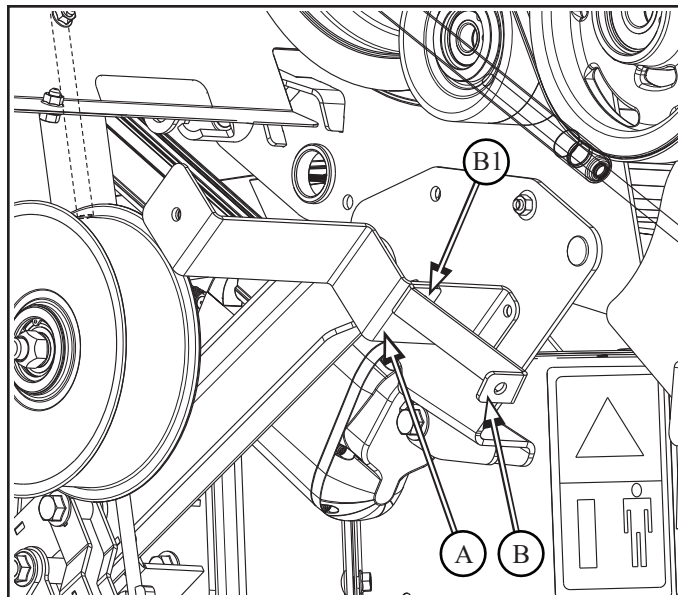


2.6.1 Install shield mount bracket (A) to plate on chopper, with:

- M8 x 20 flange head bolt and flange nut (A1) x2

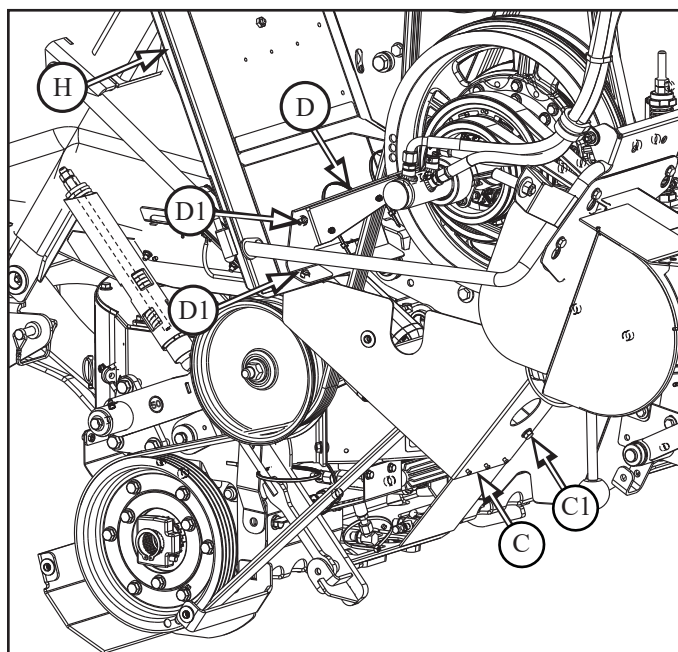


- 2.6.2** Install shield mount bracket (**B**) to plate on chopper, with:
- M8 x 20 flange head bolt and flange nut (**B1**)



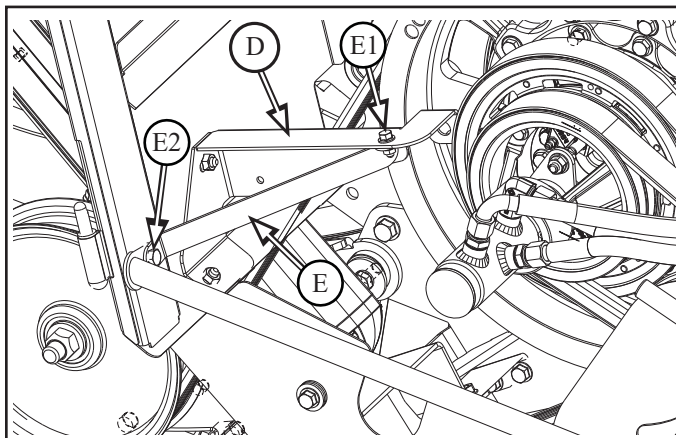
- 2.6.3** Speed sensor bracket (**D**) to be mounted along with stationary shield (**C**) to drive shield installed in previous step (**H**)

- M8 x 20 flange head bolts and flange nut (**C1**) x1
- M8 x 20 round head bolt and flange nuts (**D1**) x2



2.6.4 Install brace (**E**) to mounting bracket (**D**), with
- M6 x 16 flange head bolt and flange nut (**E1**)

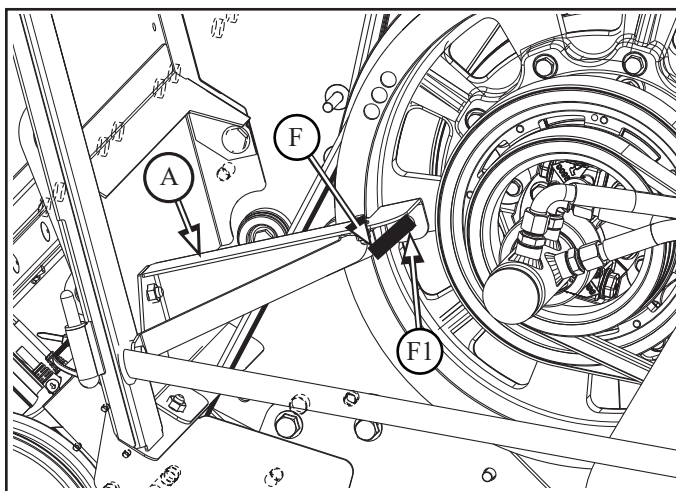
2.6.5 Install brace (**E**) to shield frame (**H**) at same
location as tubular frame mount, with:
- reuse tubular frame mount hardware (**E2**)



2.6.6 Reinstall chopper speed sensor (**F**) to mounting
bracket (**D**) to read off of drive sheave.

2.6.7 Ensure speed sensor is 2-4mm from target
- reuse hardware (**F1**)
- target is the spokes of the drive sheave

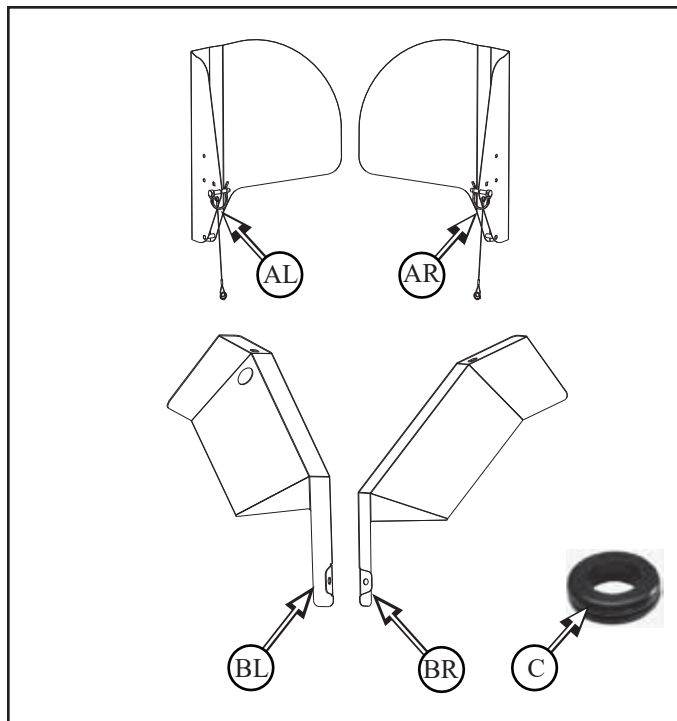
2.6.8 Harness to be install in a future step



2.7 Chaff Deflector Installation

Parts List:

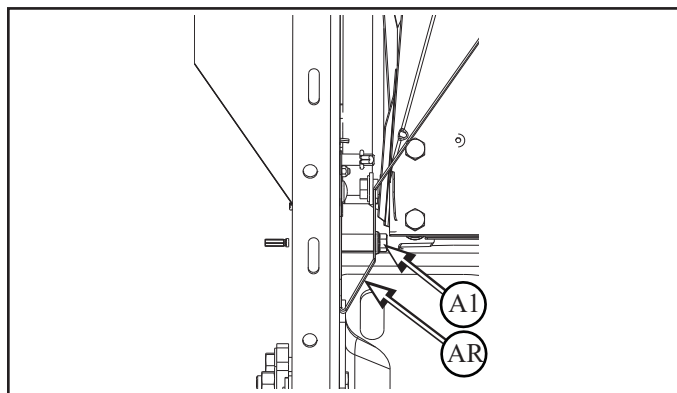
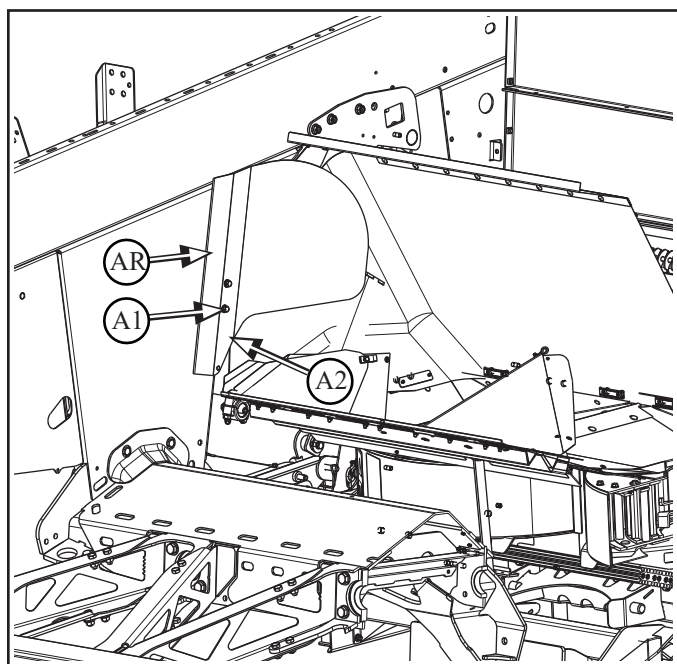
SC1219CAL	Chaff Shoe Deflector Lt (AL)	Qty 1
SC1219CAR	Chaff Shoe Deflector Rt (AR)	Qty 1
SC1219S	Bag Hardware Mount	
SC1232CL	Chaff Outer Deflector Lt (BL)	Qty 1
SC1232CR	Chaff Outer Deflector Rt (BR)	Qty 1
RP1343	Grommet (C)	Qty 1



2.7.1 Install chaff shoe deflector (**ARL**) to inside of combine wall, with:

- M8 x 20 flange head bolt, flat washer, spacer, flat washer (**A1**) x2

2.7.1.1 Repeat for right side



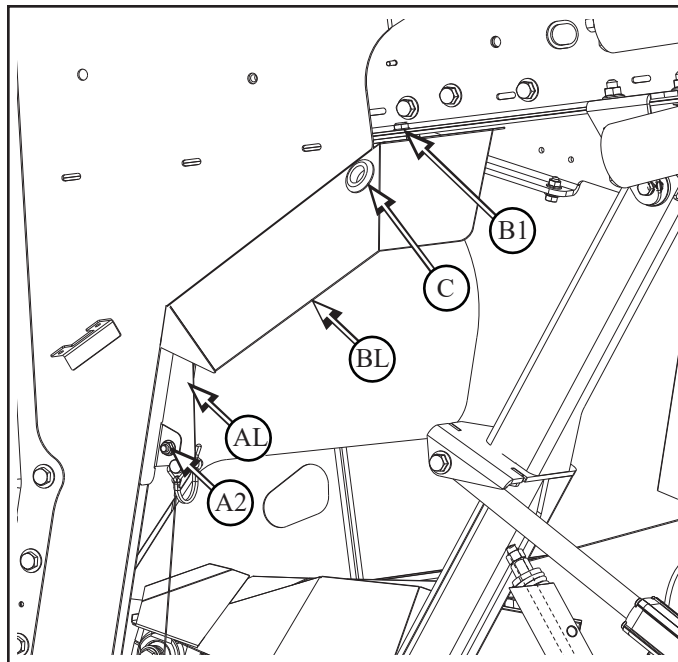
2.7.2 Install left chaff outer deflector (**BL**) to combine left rear wall flange, with:

- M8 x 25 flange head bolt (**B1**)

2.7.2.1 Secure to left chaff shoe deflector (**AL**), with:

- M8 x 16 round head bolt and flange nut (**A2**)

2.7.2.2 Repeat for right side



2.7.3 Slice grommet (**C**) through one side



2.7.3.1 Install grommet (**C**) into left outer deflector (**BL**)

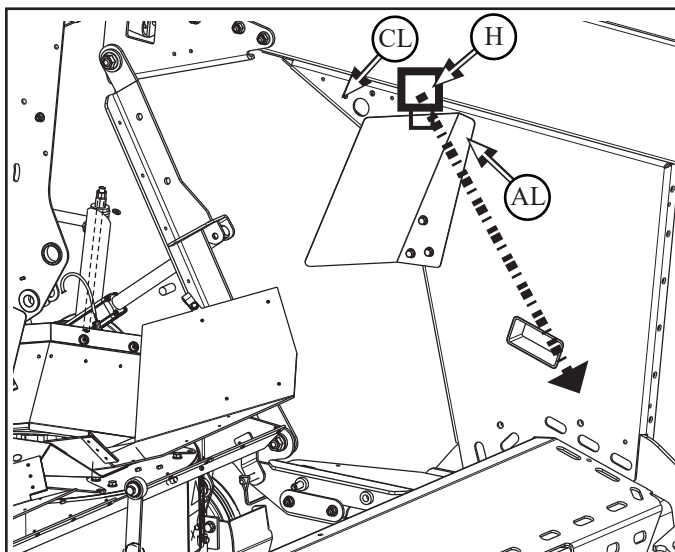
2.7.4 Disconnect harness (**G**) from existing sieve light (**H**)

2.7.5 Route harness through hole (**C4**) in left outer chaff deflector (**CL**)

2.7.5.1 Place grommet (**F**) over harness and place into hole (**C4**) in outer chaff deflector (**CL**)



2.7.6 Install sieve light (**H**) onto chaff deflector (**CL**) mounting bolt on rear inside of combine - ensure light is facing sieve



View from inside of combine

2.7.7 Reconnect harness (**G**) to sieve light (**H**)

2.8 Chaff Curtain Installation

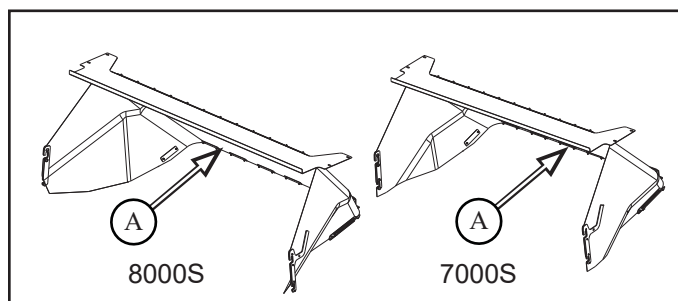
Parts List:

8000S:

SC1250CA Chaff Curtain Assembly 8S (A) Qty 1

7000S:

SC924CA Chaff Curtain Assembly 7S (A) Qty 1



2.8.1 Install chaff curtain assembly (A) to SCU support link (D), with:

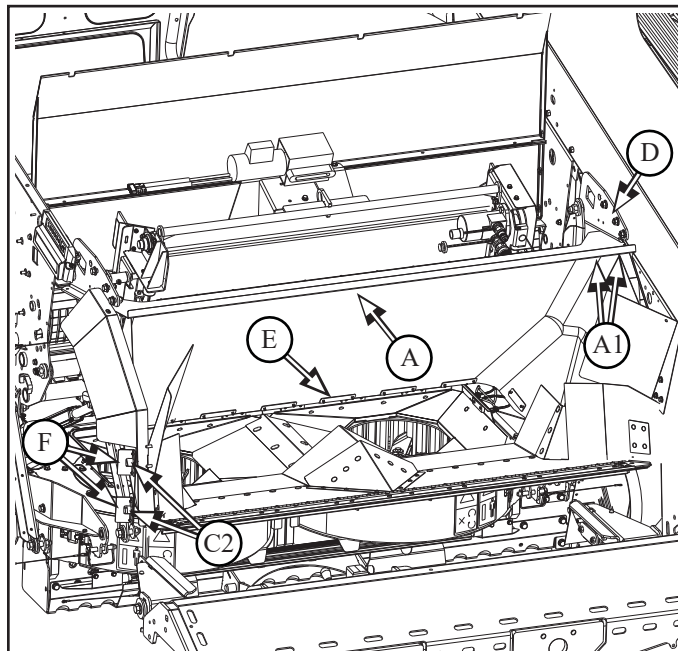
- M8 x 20 flange head bolt and flange nut (A1) x4

2.8.2 Attach metal plates (E) on bottom of rubber curtain to magnets around hopper inlet

- ensure curtain is on inside of SCU hopper inlet

2.8.3 Secure front of curtain to deflector plate by hooking plate (F) onto mounting bolt (C2) x2

2.8.3.1 Repeat for right side



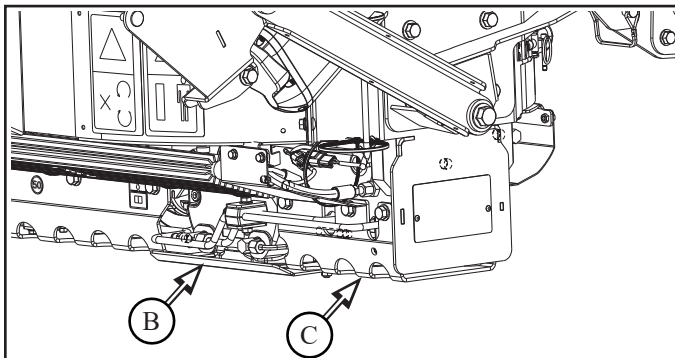
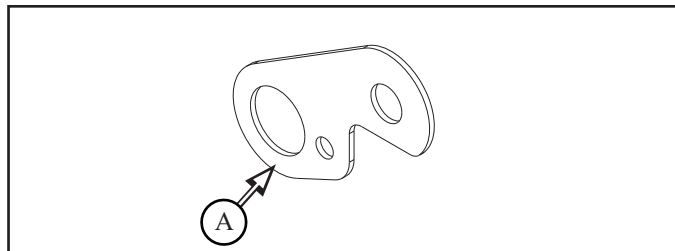
View from inside of combine

2.9 OEM Chaff Spreader Speed Sensor Installation

Parts List:

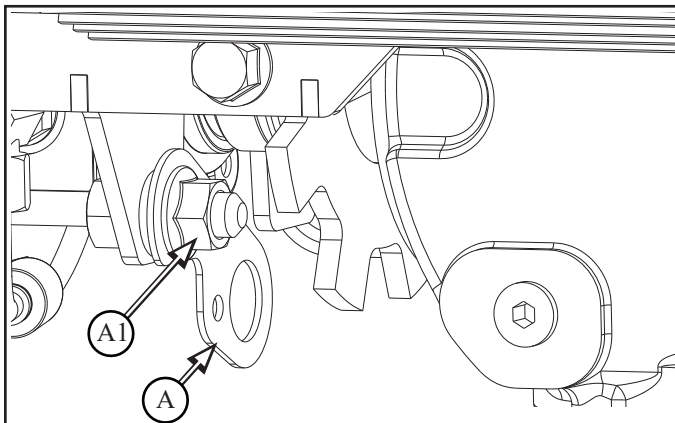
SC573C Chaff Spreader Speed Sensor Mnt Plate (A) Qty 1

2.9.1 Remove bottom guards (B & C)



2.9.2 Install mount plate (A) to hydraulic motor mount plate, with:

- M12 x 30 flange head bolt and flange nut (A1)

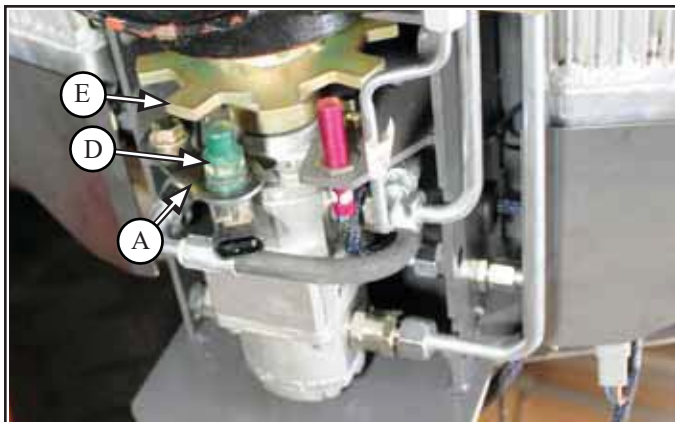


2.9.3 Reinstall OEM chaff spreader speed sensor (D) to mount plate (A)

- ensure sensor is spaced out from target (E) 2-5mm, shim accordingly with washers

2.9.3.1 Reattach factory harness to speed sensor

- ensure sensor harness is threaded thru guard holes



2.9.4 Reinstall bottom guards (B & C)

- reuse hardware
- use cable tie straps to secure harness to SCU



2.10 Sieve Extension Installation

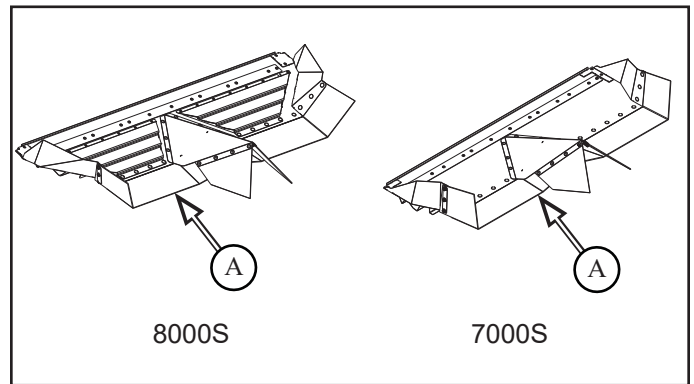
Parts List:

8000S:

SC1455CA Sieve Ext Assy 8000S (A) Qty 1

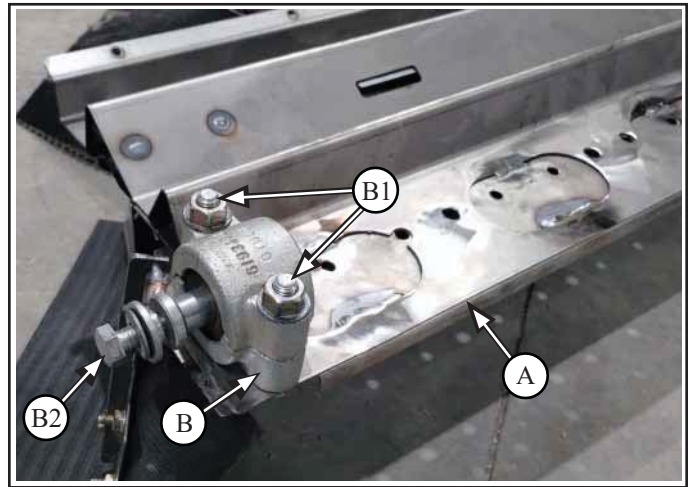
7000S:

SC1468CA Sieve Ext Assy 7000S (A) Qty 1



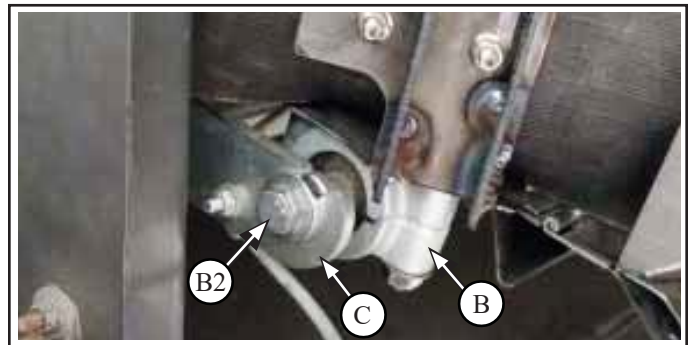
2.10.1 Reinstall bushing assembly (B) to underside of sieve extension (A), with:

- reuse hardware (B1) x2
- both sides



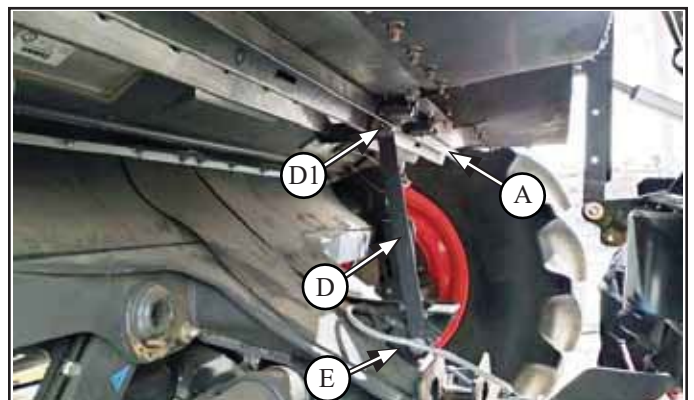
2.10.2 Install bolt (B2) on bushing assembly (B) onto arm hooks (C) and tighten

- both sides



2.10.3 Attach top of sieve extension support arm (D1) to underside of sieve extension (A)

- reuse hardware (D1)

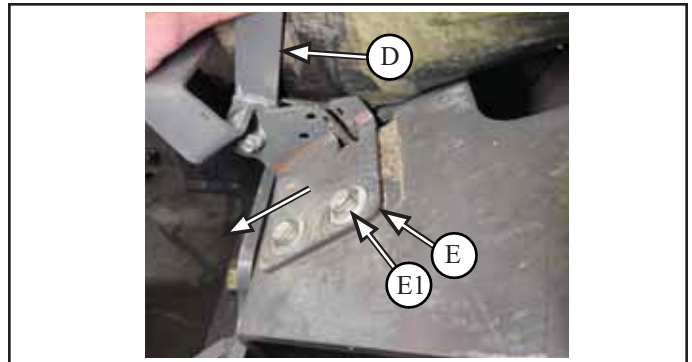


With the sieve extension installed and the SCU in operating position

2.10.3.1 Adjust the lower mount (**E**) of the support arm (**D**) so that the sieve extension is angled towards the inlets of the SCU

2.10.3.1.1 Loosen mount bolts (**E1**), slide bracket (**E**) down and retighten

- ensure that the sieve extension rubber is sealing against the SCU inlets without placing excessive pressure onto the SCU inlets



2.10.4 View of sieve extension (**A**) installed



2.11 ECU Mount Bracket Installation

Parts List:

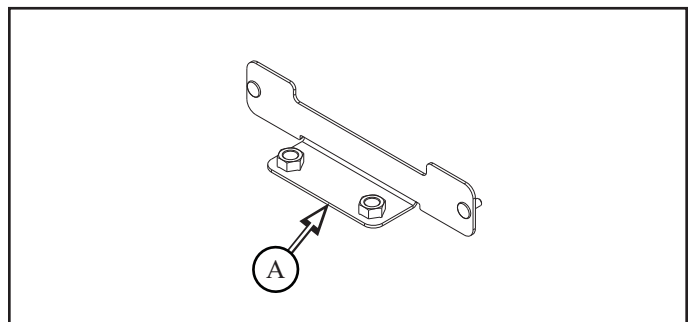
8000S:

SC544C ECU Mount Plate (**A**)

Qty 1

7000S:

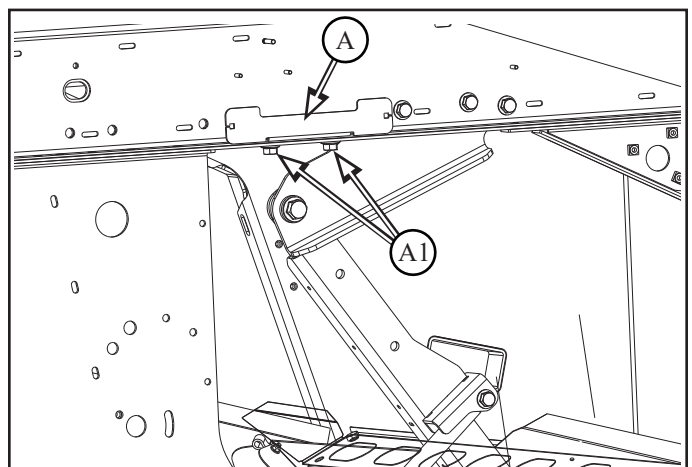
previously installed in section 2.4.1



8000S:

2.11.1 Install ECU mount plate (**A**) to right side of combine channel edge, with:

- M12 x 30 flange head bolt (**A1**) x2



3 Electronics Installation



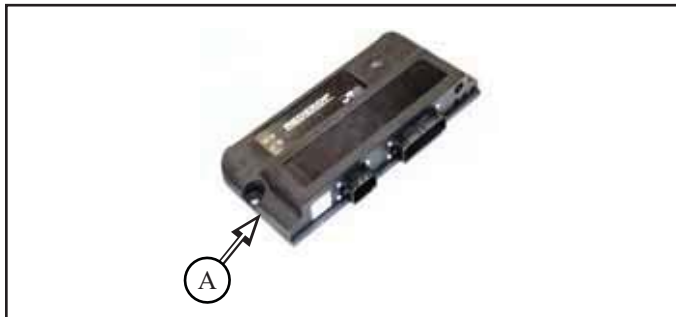
Do not fully secure harnesses in place until full range of motion of SCU has been performed

3.1 ECU Installation

Parts List:

RP1021 ECU (A)

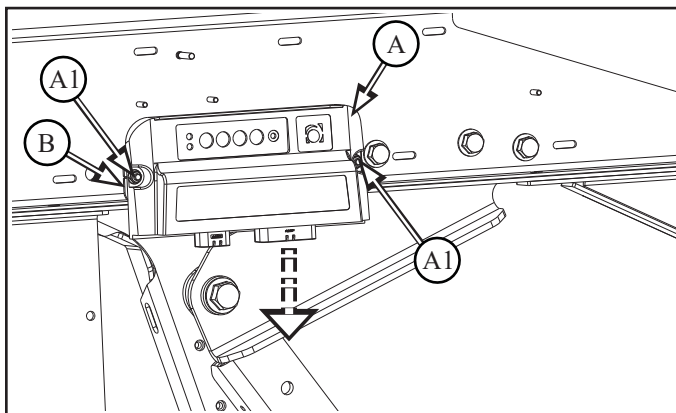
Qty 1



8000S:

3.1.1 Install ECU (A) to the mount plate (B), with:

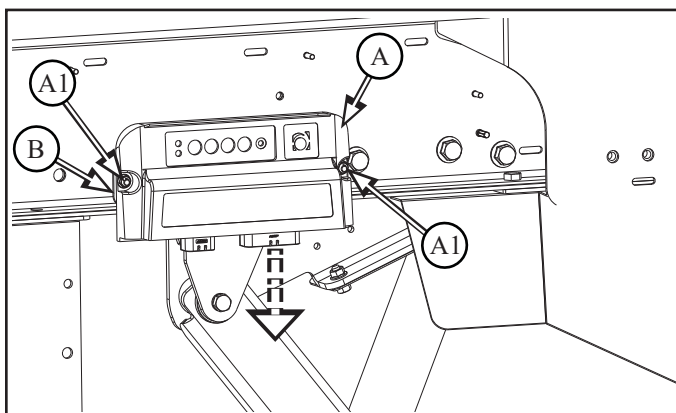
- M6 flange nut (A1) x2
- ensure that the connector receptacles of the ECU are facing downward (see arrow)



7000S:

3.1.2 Install ECU (A) to the mount plate (B), with:

- M6 flange nut (A1) x2
- ensure that the connector receptacles of the ECU are facing downward (see arrow)

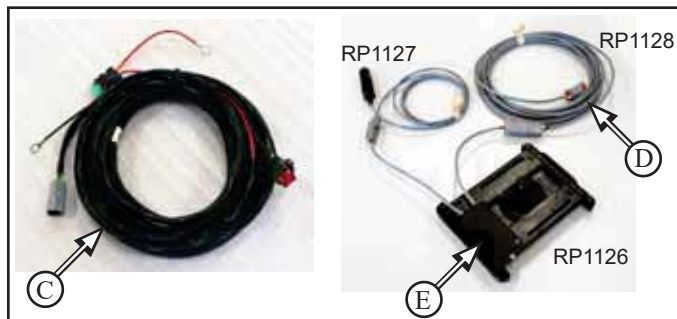


3.2 Harness Installation

3.2.1 Install ECU Power/Cab Harness

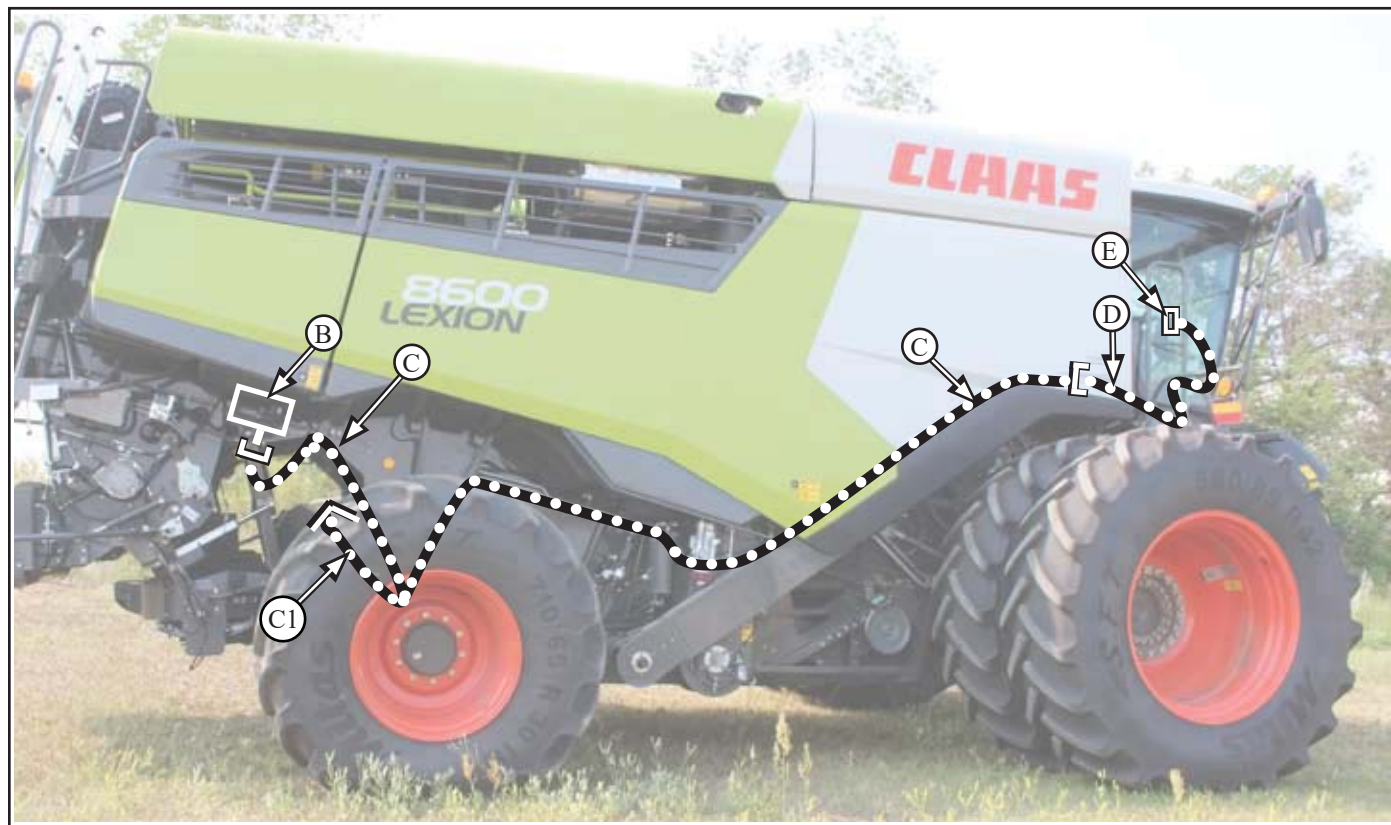
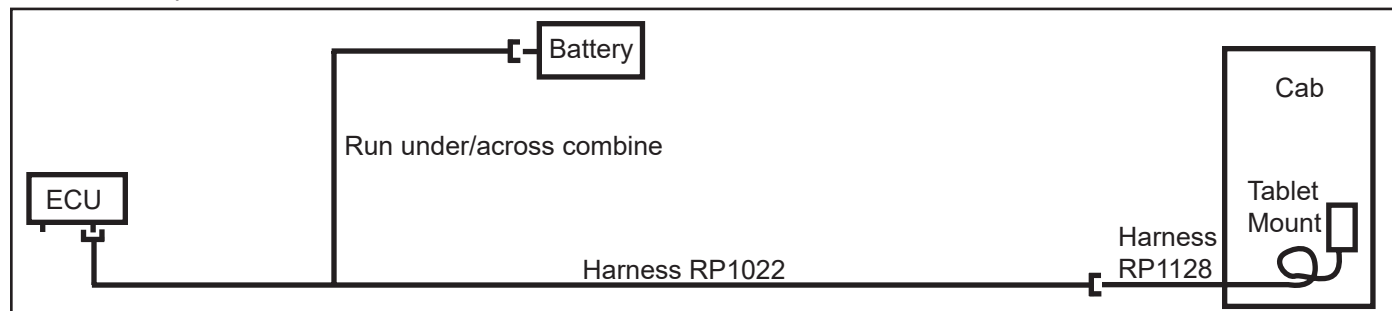
Parts List:

RP1022	Harness ECU Power/Cab (C)	Qty 1
RP1128	Harness CAN Extension 20ft (D)	Qty 1
RP1126A	Tablet Mount Assy (E)	Qty 1



3.2.1.1 Install ECU Power/Cab Harness (C)

- connect harness (C) to ECU (B)
- route harness as shown along right side of combine from ECU (B) to up behind cab
- at Tee in harness, route "power lines" (C1) underneath the combine up to the battery on the left-hand side
- from behind cab, connect harness (C) to tablet harness (D) and route into cab, connect to tablet (E)
- ensure USB cable (provided with tablet) is connected from tablet to side connection port on holder
- fasten tablet (E) to railing inside cab
- use cable tie straps to secure harness to existing harness or hydraulic lines running along side of combine
- tie up all harnesses and hydraulic lines so they do not rub on components, are clear of any moving parts and can move in all operations



3.2.2 Install Chopper/SCU Harness

Parts List:

RP1507 Harness ECU / Chopper (F)

Qty 1

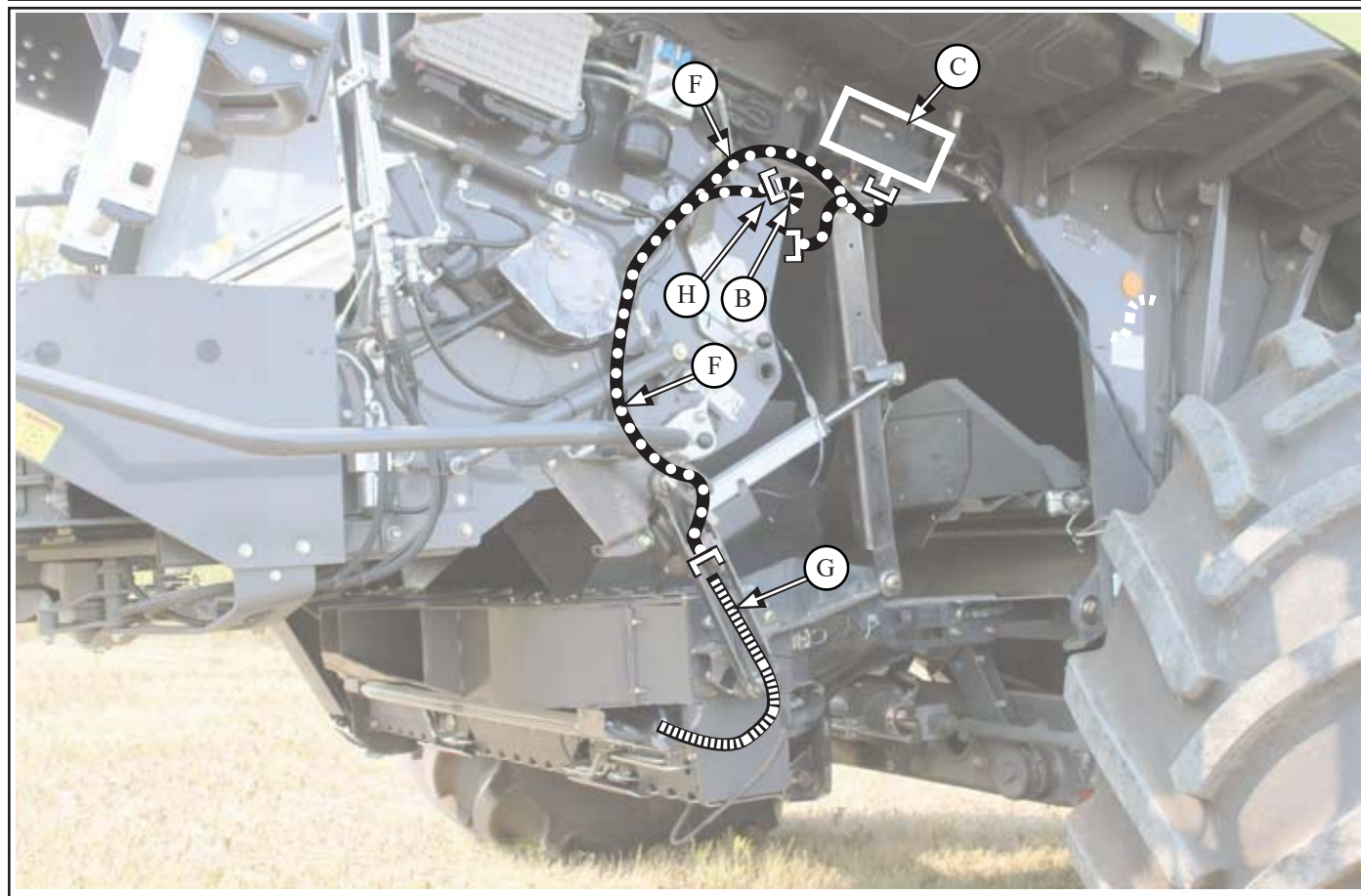
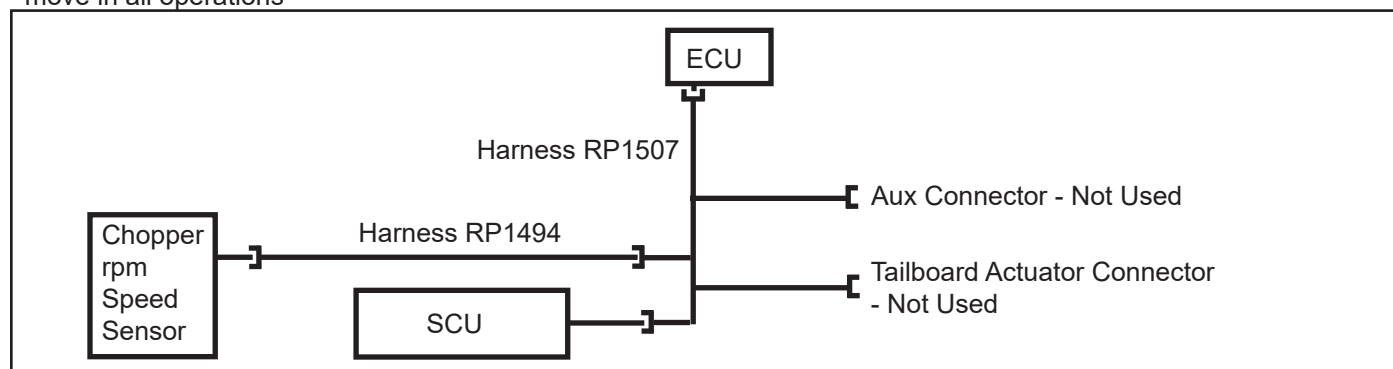
RP1494 Harness Speed Sensor (B)

Qty 1



3.2.2.1 Install Chopper/SCU Harness (F)

- connect harness (F) to ECU (C)
- route harness as shown along right side of chopper from ECU (C) to pre-installed SCU harness (G)
- connect branch to chopper speed sensor extension harness (H) follow routing alongside actuator harness on next page
- branch for auxilliary is not used
- branch for tailboard actuators is not used
- use cable tie straps to secure harness to existing harness or hydraulic lines running along side of chopper
- tie up all harnesses and hydraulic lines so they do not rub on components, are clear of any moving parts and can move in all operations

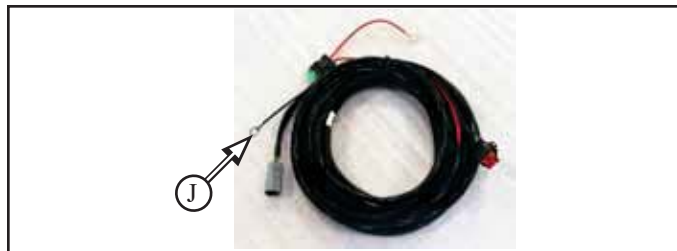


3.2.3 Install SCU Actuator Harness

Parts List:

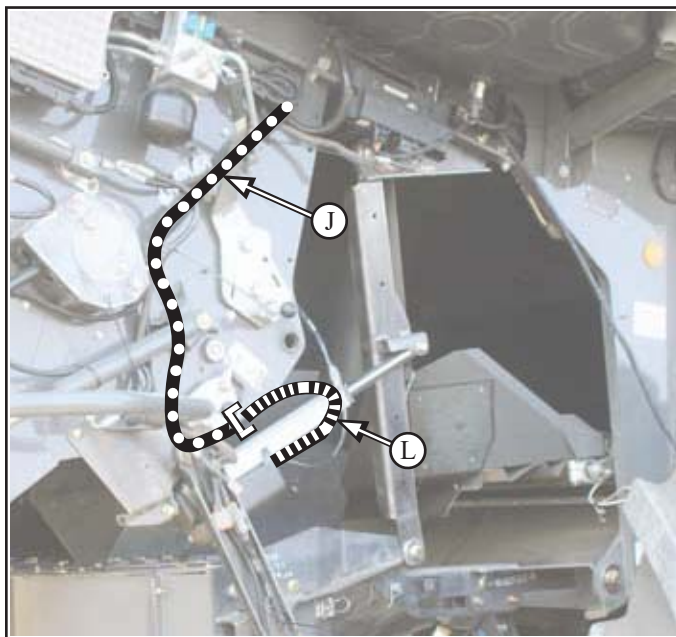
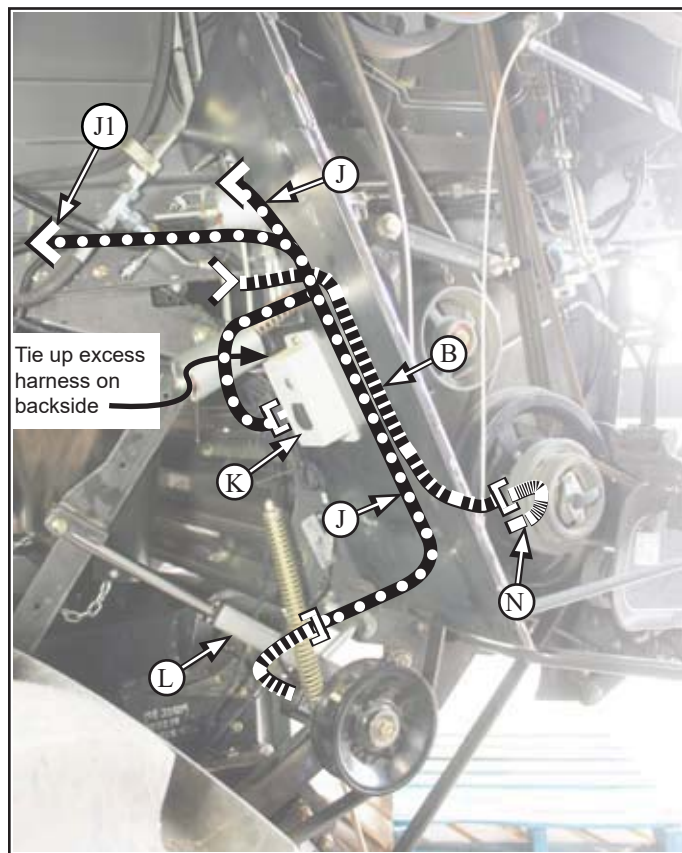
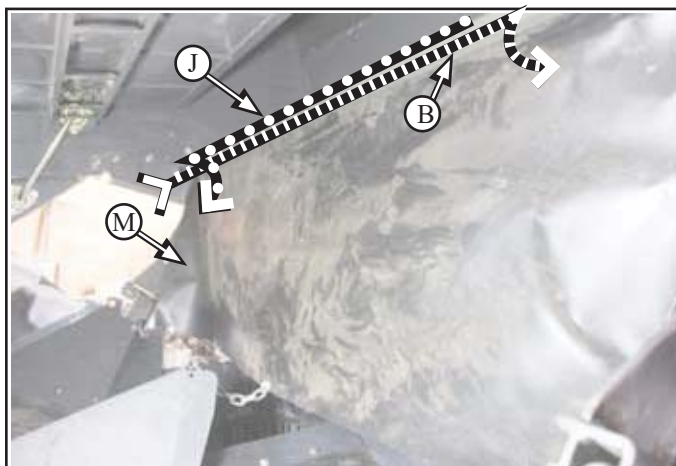
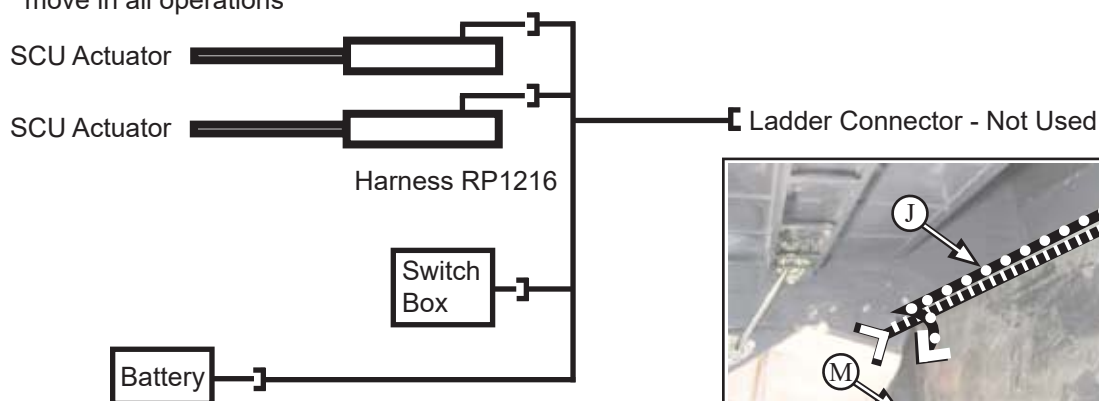
RP1216 Harness SCU Actuator (J)

Qty 1



3.2.3.1 Install SCU Actuator Harness (J)

- connect harness (J) to switch box (K)
- route harness as shown from switch box (K) to left SCU actuator (L)
 - tie up excess cable up on backside
- continue routing harness above curtain (M) to right SCU actuator (L)
- route speed sensor extension harness (B) from ECU harness along curtain to speed sensor (N)
- route "power lines" (J1) along left side of combine, thru the front of battery box
- connect to battery
- branch for ladder is not used
- use cable tie straps to secure harness to existing brackets, harness or hydraulic lines running along side of combine
- tie up all harnesses and hydraulic lines so they do not rub on components, are clear of any moving parts and can move in all operations



3.3 Software Codes

To install the appropriate parts of the software, the following codes have to be entered

3.3.1 Monitor Icons

The following monitor icons display throughout the pages:

(A) = Straw Chopper

(B) = SCU

(C) = Settings Screen

(D) = Home / Parent Screen

(E) = ECU Information

(F) = Alarm History

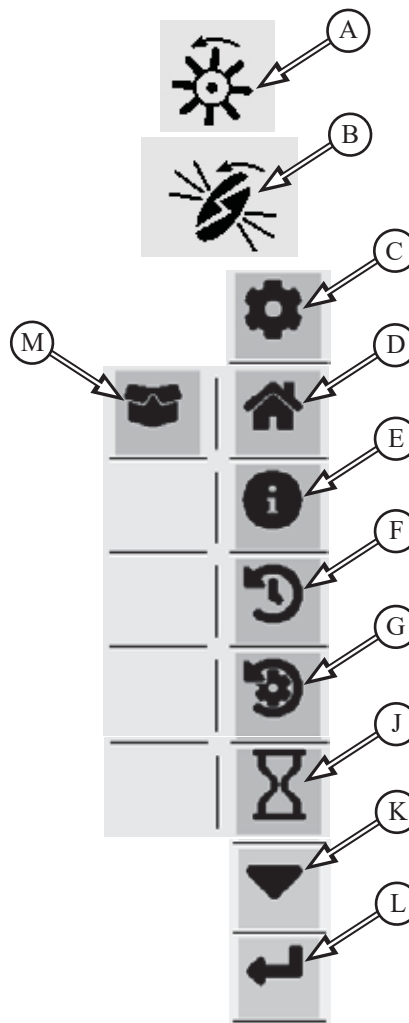
(G) = Defaults Screen

(J) = Time

(K) = Page Up or Down

(L) = Back one page

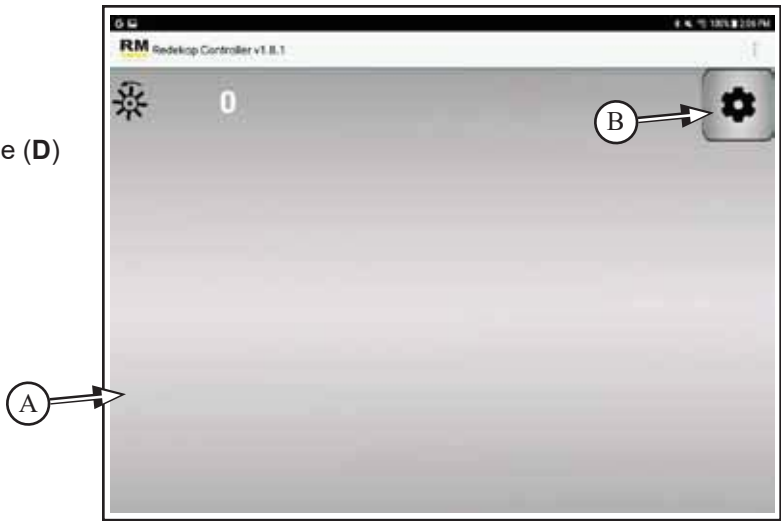
(M) = Installed Features Screen



3.3.2 Installed Features Screen

Redekop Home screen (A)

Select <Settings> button (B) to display Settings page (D)

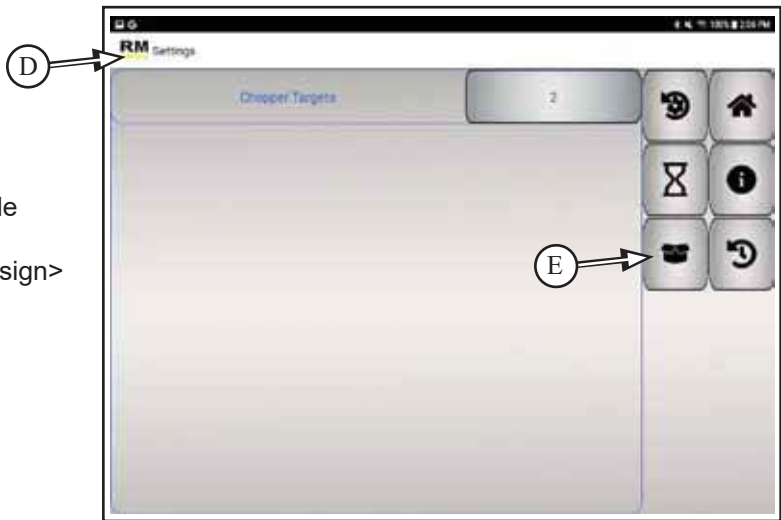


3.3.3 Installing SCU Feature

SCU feature needs to be installed with software code

From the installed features screen (F), select <plus sign> button (H) to display Settings screen (D)

Select <Installed Features> button (E)

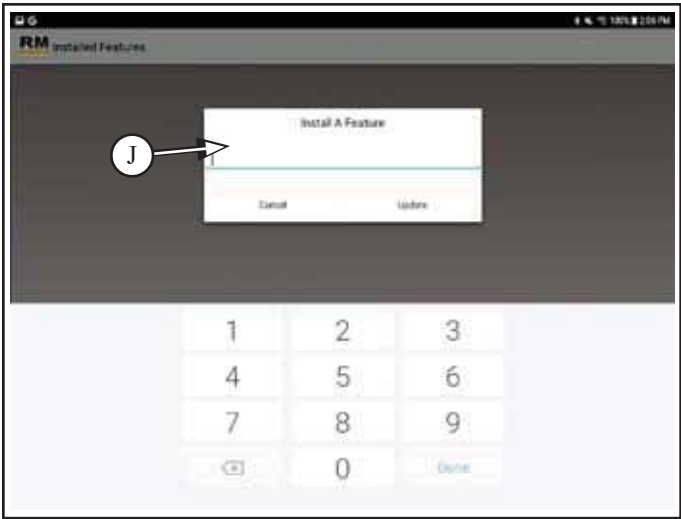


Installed Features screen (F) displays list of software features that are installed

Select <Plus Sign> (H)



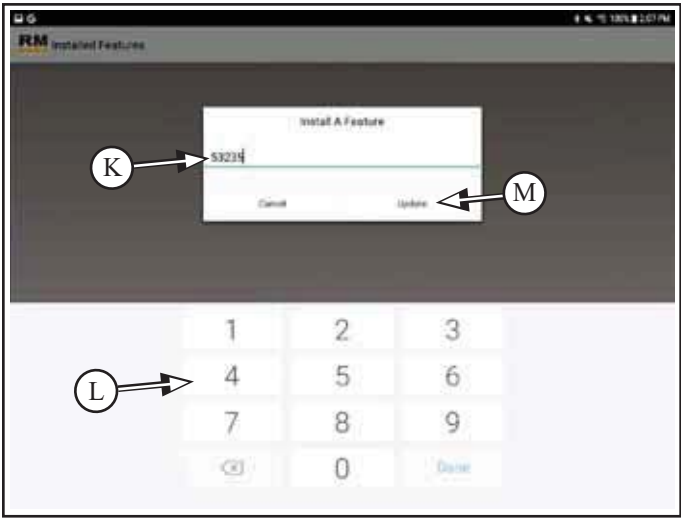
Screen defaults to code input screen displaying blank (J)



To enter new code (K), enter <numbers> (L) from number pad, code will display in center of screen.

SCU Code: 53235

Select <Done> (M) to confirm code



SCU Option (N) now displays on INSTALLED FEATURES page



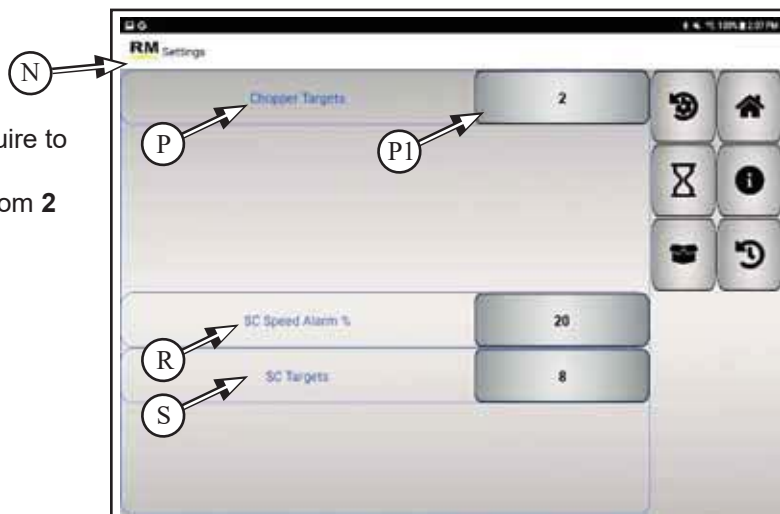
3.3.4 Redekop Screen

Select <Back> button on tablet to display settings screen (N)

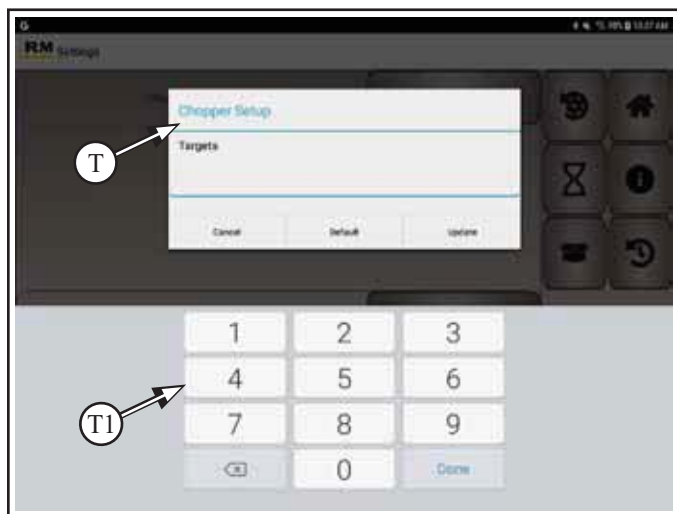
Default Chopper Targets (P) defaults to 2, may require to be changed depending on combine model
- for Claas 7000 and 8000 Series change targets from 2 to 5 as per below procedure

Default SC Speed Alarm (R) % remains at 20

Default SC Targets (S) remains at 8



Procedure to change Default Chopper Targets (P):
- select <2> button (P1) to display Chopper Setup - Targets screen (T) with number pad (T1)



Type in 4 from number pad (T1)
- displays in Targets area (T2)

Select <Update> button (T3)
- chopper targets will now be updated



REDEKOP page is displayed and ECU verified connected



After run screen has been created, the Redekop page appears, the following information is displayed:

(A) = Chopper Operating Speed

(B) = SCU Operating Speed

(B1) = Temperature Indicator of the left-hand side Gearbox

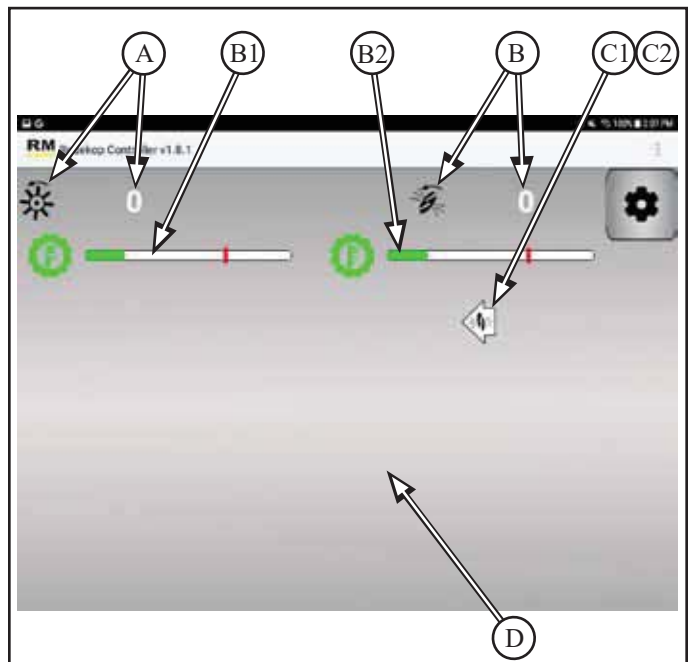
(B2) = Temperature Indicator of the right-hand side Gearbox

Chopper Door Position Indicator

(C1) = SCU Position

(C2) = Chopper only mode

(D) = Alarm Display Zone to display the alarms. See Settings Screen in this section for defined alarm setpoints.



3.3.5 Settings Screen

CHOPPER TARGETS (A) - targets recorded per revolution of the chopper shaft (default is 2, change to 4 for Claas)

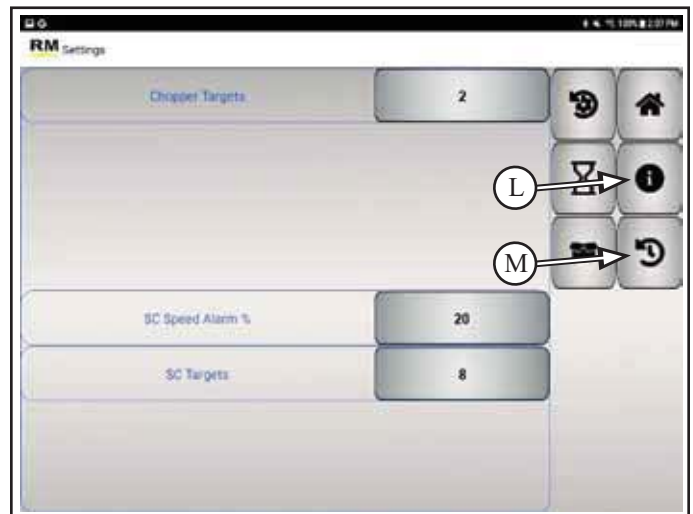
SC SPEED ALARM (B) - the alarm setpoint % below the maximum recorded speed measured during system startup
- default is 20% (if the speed drops by 20% the alarm will go off)

SC TARGETS (C) - targets recorded per revolution of the SCU shaft (default is 8)



3.3.6 ECU Diagnostics Screen

From the Settings Screen, select <ECU Information > button (L)



3.3.7 ECU Diagnostic Screen

The following operation values for the Redekop ECU are displayed:

Operating Ranges:

(A) Battery Voltage - above 10V

(B) ECU Input Voltage (from ISO Bus) - above 9.5V

(C) ECU Regulator Voltage - above 2.8V

(D) ECU Temperature - range of -40 to +105C

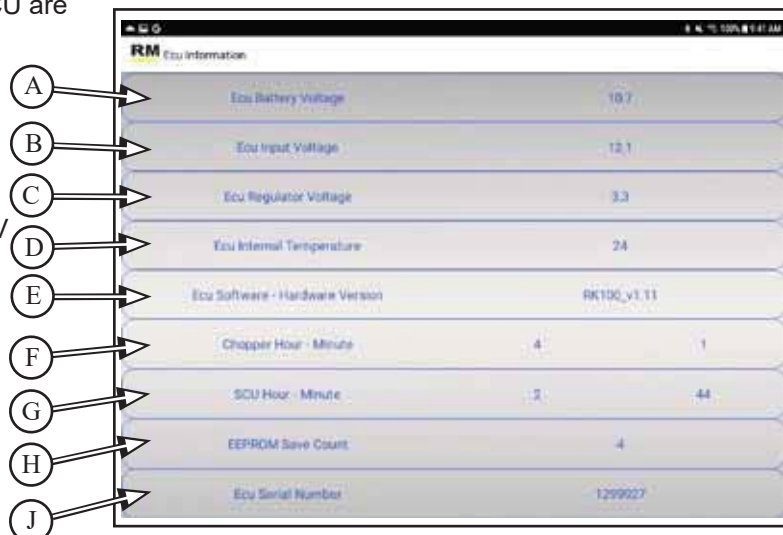
(E) ECU Software Version

(F) Chopper Runtime (hours - minutes)

(G) SCU Runtime (hours - minutes)

(H) Save Count - diagnostic value - above 0

(J) ECU Serial Number



RM Ecu Information	
(A) Ecu Battery Voltage	10.7
(B) Ecu Input Voltage	12.1
(C) Ecu Regulator Voltage	3.3
(D) Ecu Internal Temperature	24
(E) Ecu Software - Hardware Version	RK100_v1.11
(F) Chopper Hour - Minute	4 1
(G) SCU Hour - Minute	2 44
(H) EEPROM Save Count	4
(J) Ecu Serial Number	12999227

3.3.8 Alarm History Screen

From the Settings Screen, select <Alarm History > button (M)

Records Chopper time, SCU time and alarm triggered at that time



Chopper Time	SCU Time	Alarm Code	Date Time
--------------	----------	------------	-----------

3.3.9 Alarm Displays



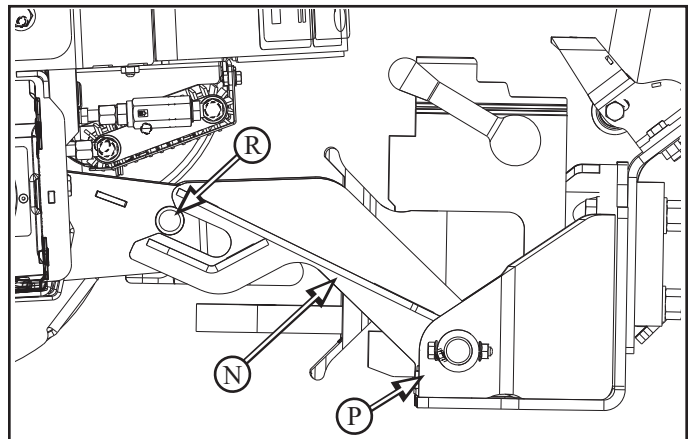
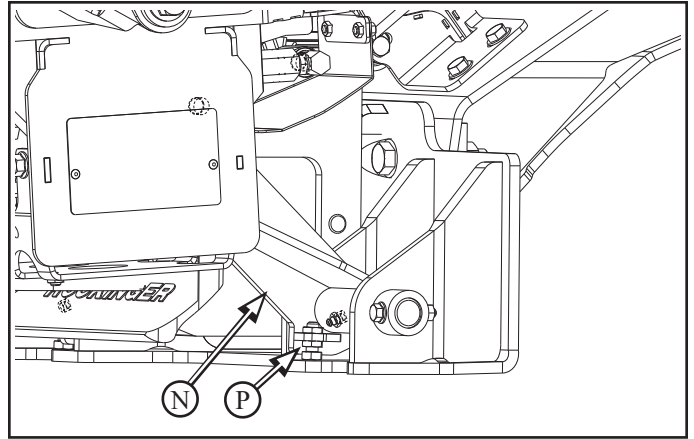
ATTENTION!
Low battery or alternator voltage can cause system errors

ALARM TEXT	ALARM SYMBOL	ACTION / INFORMATION
Low Battery Power Check Fuse (Battery Voltage Low)		Check fuse on Redekop wiring harness - replace if required
Low ECU Voltage Check ECU (ECU Voltage Low)		Check the harnessing and connectors for damage or clean connectors (make sure Combine is running and alternator is good)
Low Regulator Voltage Check ECU! (Regulator Voltage Low)		Internal failure to ECU - send for repair
Internal Baffle Out of Position (may indicate Plugging condition)		Check position of internal baffle - see section 2.21 & 2.2.2
Disengage SCU! Chopper is Disengaged (SCU Spinning)		Check sensor clearance (range =)
Current Overload (Actuator Overload)		Check chopper slide, if binding fix problem
Chopper On, Tailboard Down (Actuator Ladder Position)		If equipped with ladder sensor / ladder, check position
ECU Temperature above 115C (ECU Temperature High)		Internal failure to ECU - send for repair
Pressure Below Threshold (Oil Pressure Low)		Check cooling circuit for leaks, add oil to middle of sight gage
Temperature Above Threshold (Oil Temperature High)		Check oil level, check suction strainers, check cooler elements
SCU Unit RPM Low (SCU Low RPM)		Check sensor & belt, belt tension
Temperature # Sensor Disconnected (Oil Temperature Disconnected)		Check sensor

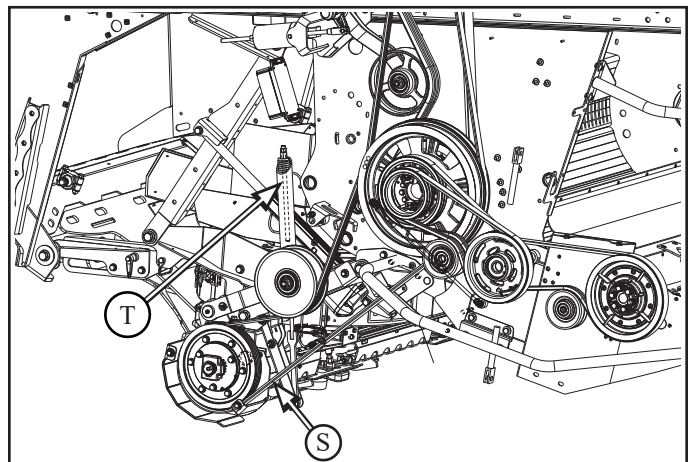
4 Adjusting SCU Position

4.1 Move the SCU to operating position

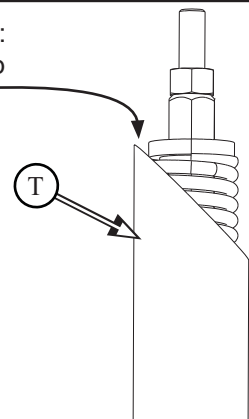
4.2 Adjust SCU hitch support arms (N) using adjustment bolt (P) so the slot on the arms aligns with pins (R) on SCU



4.3 With SCU in operating position, tension the SCU drive belt (S) with tensioner (T)



Correct belt tension when:
Washer is lined up with tip
of tension tube



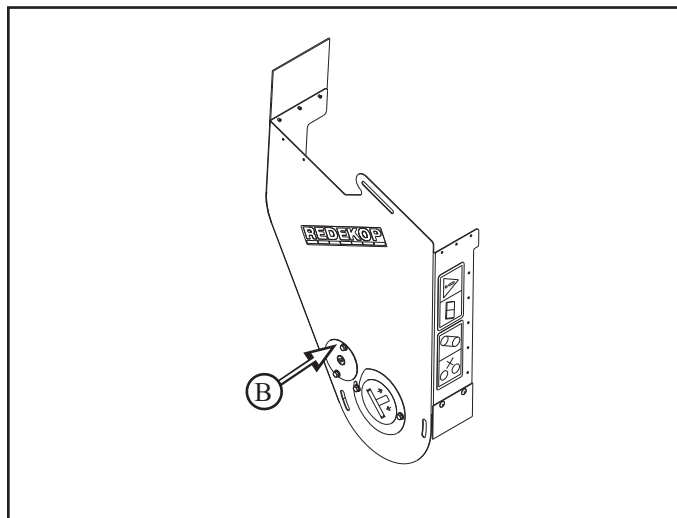
Secure harnesses in place with zip ties
ensuring harnesses are not damaged within
full ranges of SCU.
Secure harnesses away from drive belts.

5 Shield Installation

8000S:

Parts List:

SC568CA Shield SCU Drive Assy 8S(**B**) Qty 1

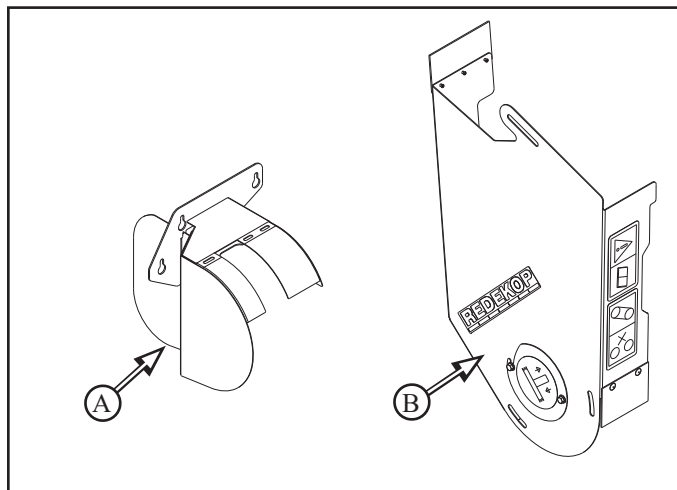


7000S:

Parts List:

SC1208C Shield Tailboard Claas 7000 (**A**) Qty 1

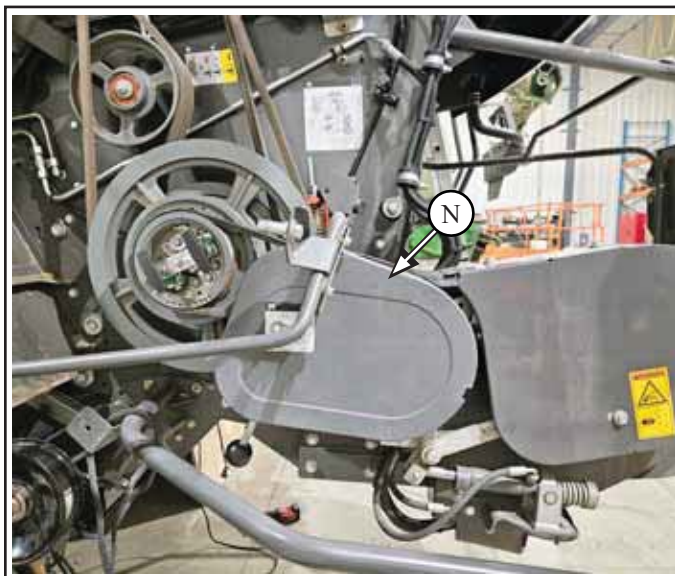
SC951CA Shield SCU Drive Assy 7S(**B**) Qty 1



5.1 Drive Shield Installation

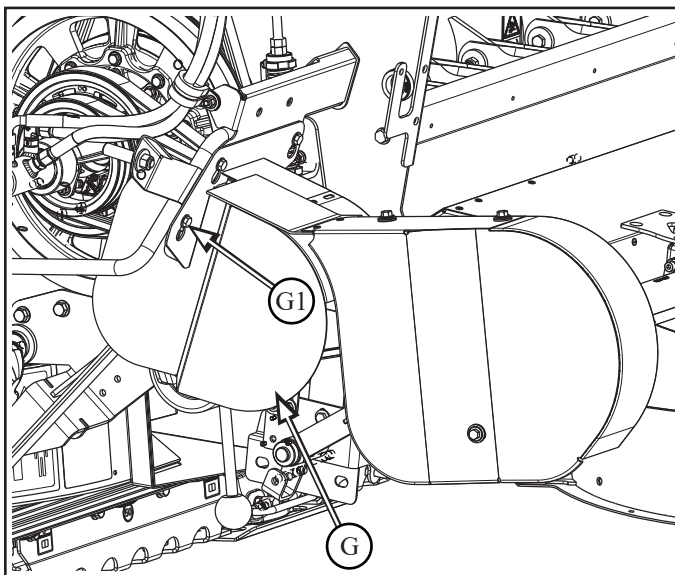
8000S

5.1.1 Reinstall drive shield (N)



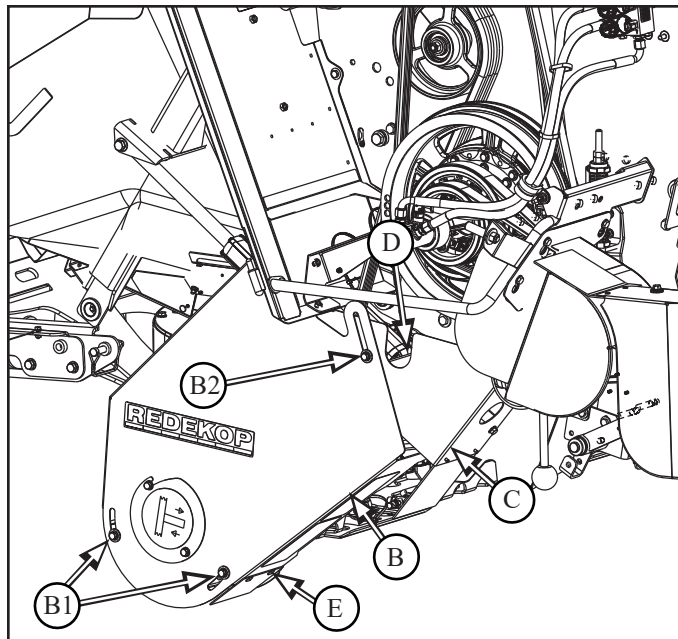
7000S

5.1.2 Install drive shield (G), with: - reuse mount hardware (G1) x3



5.1.7 Install drive shield (**B**) to SCU stationary guard (**C**), with

- M8 x 25 flange head bolt and washer (**B1**) x2 and fit up to mount bracket (**E**)
- M8 x 25 flange head bolt, washer and lock nut (**B2**) x1
- Ensure bolt goes through stationary shield (**C**) and support bracket behind (**D**)



5.2 Rear Guard Frame Re-Installation

Parts List:

Existing Rear Guard Frame (A)

Qty 1

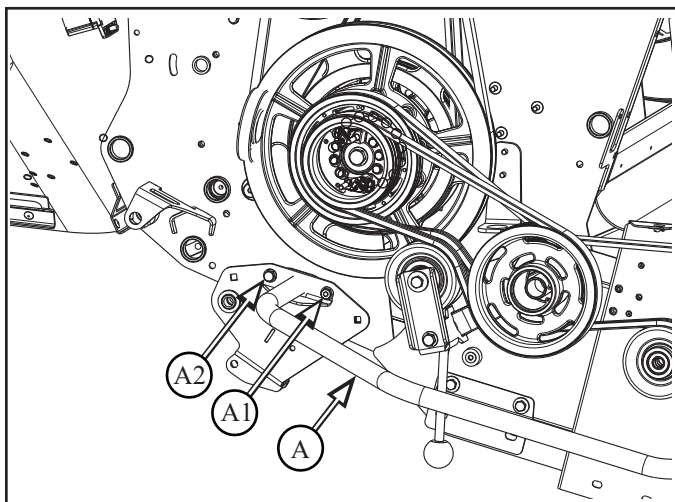


5.2.1 Reinstall rear guard frame (A) to rear of combine above power spinners, with:

5.2.1.1 Remove hardware (A1 & A2)
- to be reused

5.2.1.2 Install guardrail (A) onto stud (A1), secure with:
- reuse nut and washer (A1) on stud
- reuse M10 x 30 flange head bolt (A2)

5.2.1.3 Repeat for right side



5.2.2 View of installed guardrail (A)





CAUTION

Check that all tools and loose hardware have been removed from the combine and SCU before running SCU



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)
M16 - flanged	231 / (171)	331 / (244)
- non flanged	210 / (155)	301 / (222)



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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info@redkopmfg.com

www.redkopmfg.com

REDEKOPTM

For additional and the most up to date Manuals:



REDEKOPTM