REDEKOP™

SEED CONTROL UNIT

CR SERIES

WITH MAV CHOPPER

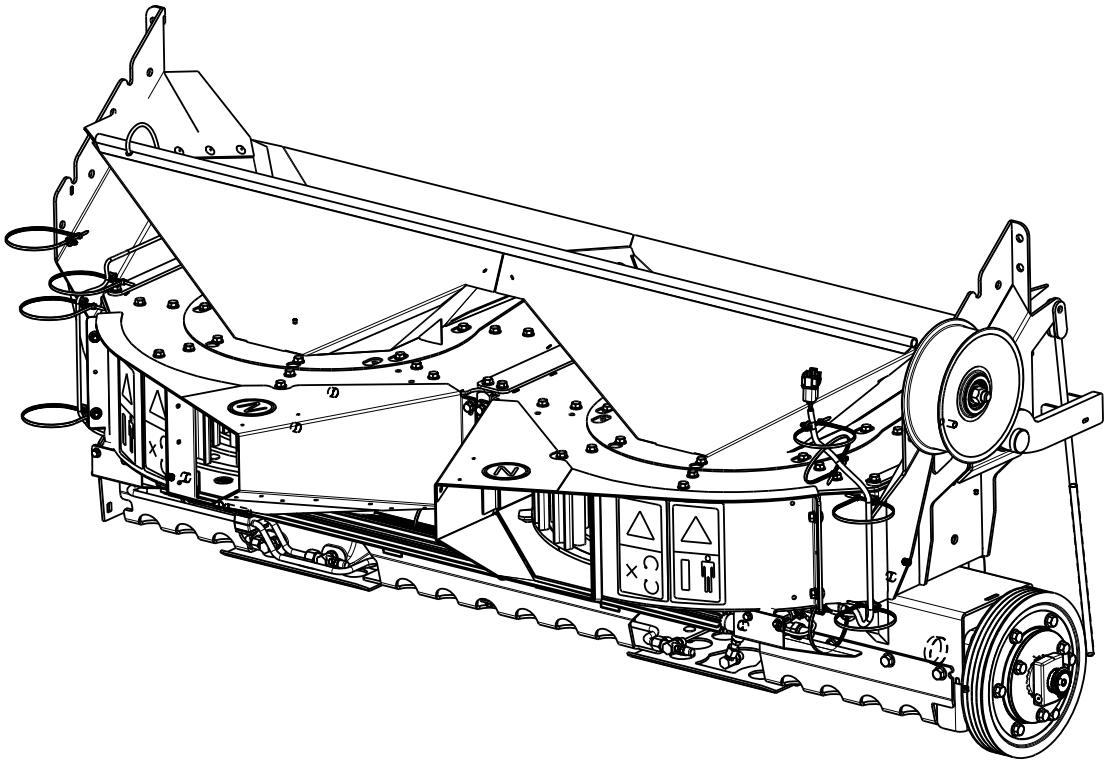
INSTALLATION MANUAL

PRODUCT NUMBER: **850-310H**

SC073-02_R4

REDEKOP™

REDEKOP™



Seed Control Unit

CR with Redekop MAV Chopper Installation Manual

Table of Contents

Continued on next page

Seed Control Unit

CR with Redekop MAV Chopper Installation Manual

Table of Contents

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.

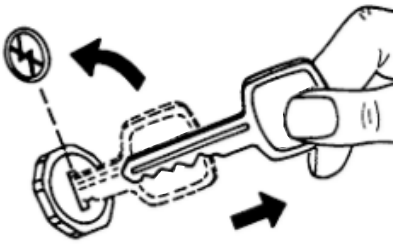
Never leave combine unattended as long as engine is running.

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.

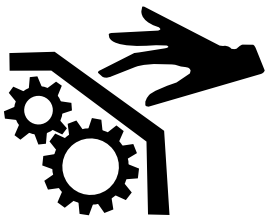
Securely support any machine elements that must be raised for service work.

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.

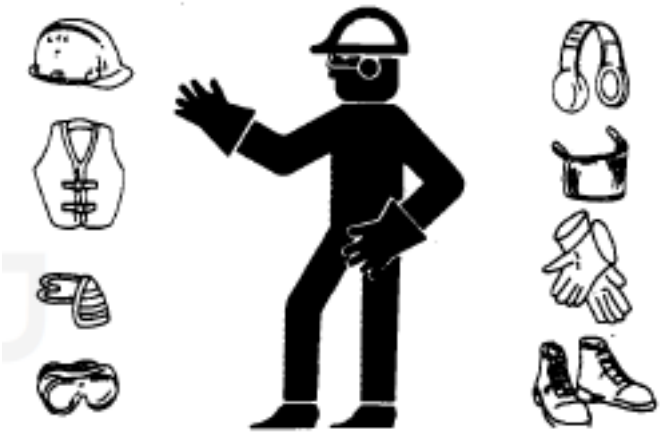
Follow recommended procedure for removal and installation of components in the manual.

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!

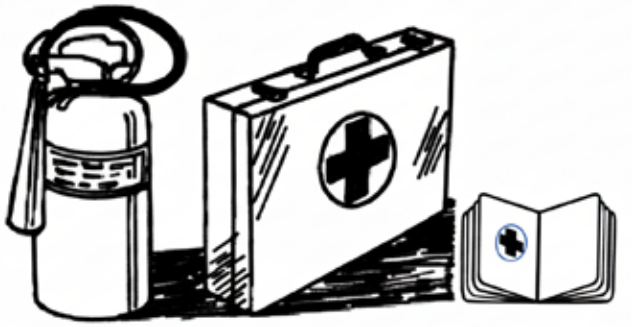
Interference with speech communication, acoustic signals is possible.

0.17 Prepare for Emergencies

0.17.1 Be prepared if a fire starts.

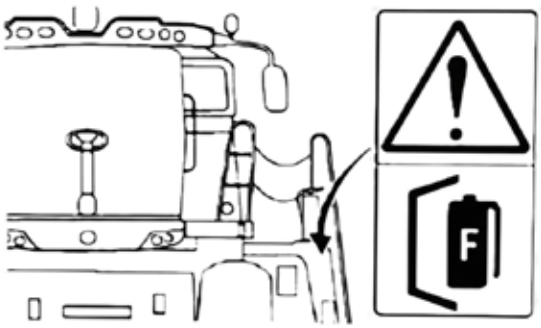
Keep a first aid kit and fire extinguisher handy.

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 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! DO NOT RETURN TO THE FIRE! 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. Release the locking mechanism on fire extinguisher to allow discharge.
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 in identified by a pictorial in a warning triangle. An adjacent pictorial provides information on how to avoid personal injury. These safety signs and a brief explanatory text follow.

Hand Injury / Rotate Danger
RP1089
Risk of injury caused by rotating parts.

Projectile Hazard / Stand Clear
RP872
Stay clear of these components when the engine is running.

Caution / Check Service Manual
RP873
This operator's manual contains all important information necessary for safe machine operation. Carefully observe all safety rules to avoid accidents.

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

Kickback Hazard / Stand Clear
RP1086
Avoid personal injury. Kickback hazard when removing access panel.

Caution / Hearing Protection Required
RP1090
Use hearing protection whenever operating the machine.

0.22 Information Decals

Redekop Seed Control Unit Serial Number Plate

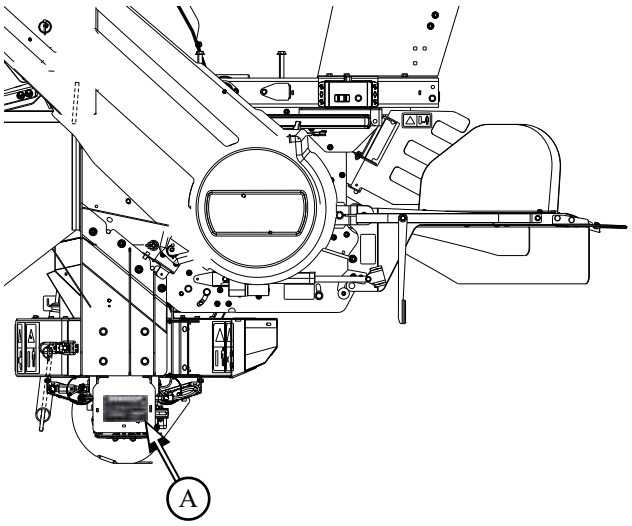
Grease Every 12 Hours
RP1091

Grease Every 50 Hours
RP1092

Oil - use SAE 75W90 GL5 Synthetic
RP1093

0.23 Serial Number

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



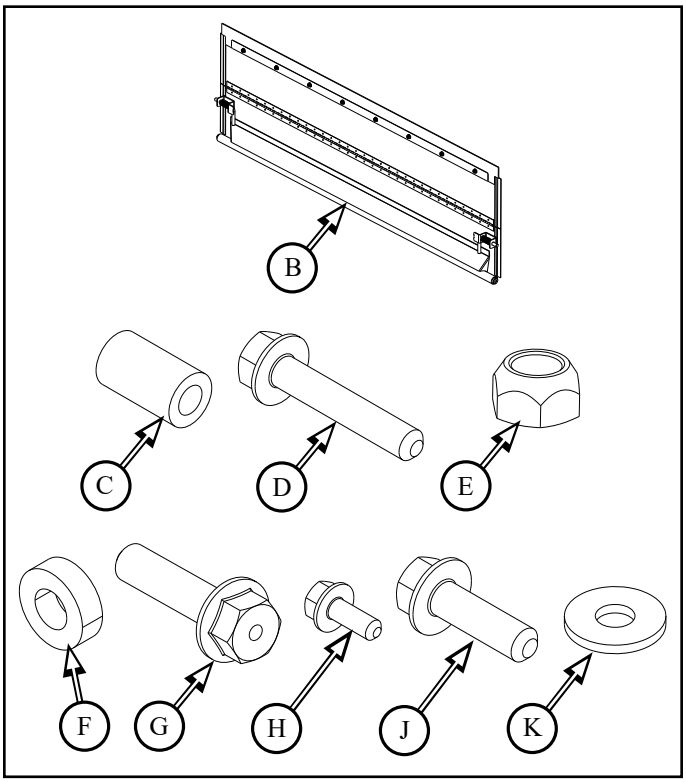
1 Straw Chopper Modifications for SCU

If the Straw Chopper has previously been installed without an SCU or this is a new installation with a SCU, the following modifications will have to be completed to accomodate the SCU.

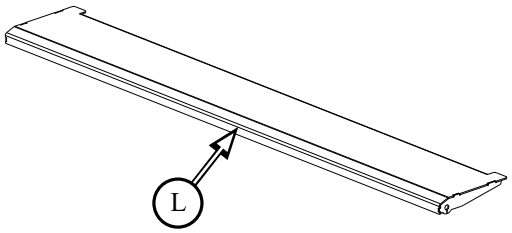
1.1 Chaff Door Installation

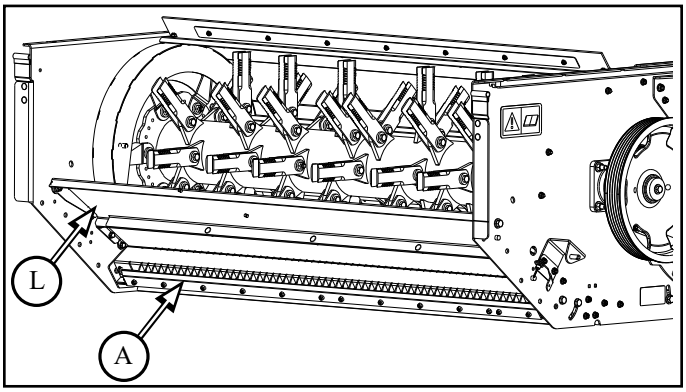
Parts List:

CH686BA	Chaff Door Assembly (**B**)	Qty 1
Hardware located in hardware bag SC591S:		
CA413Z	Tube Latch Spacer (**C**)	Qty 2
B21M-0845	Bolt M8x45 (**D**)	Qty 2
N42M-08	Locknut M8 (**E**)	Qty 2
CH689Z	Spacer (**F**)	Qty 2
CD749	Bolt M12x40 with internal thread (**G**)	Qty 1
B21M-0616	Bolt M6x16 (**H**)	Qty 1
B21M-1240	Bolt M12x40 (**J**)	Qty 1
W12M-12	Flat Washer (**K**)	Qty 2

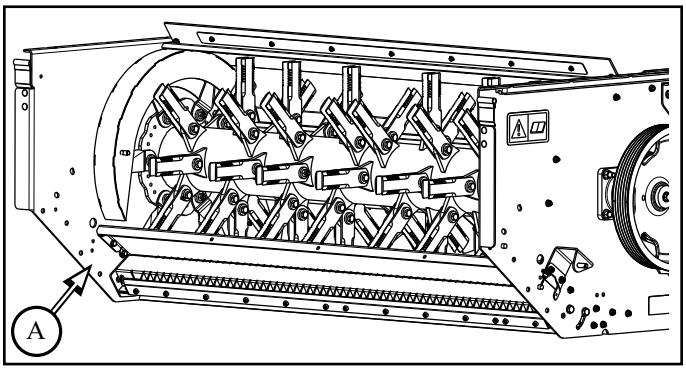


1.1.1 Remove front floor extension (**L**) from chopper (**A**) - floor and hardware not to be reused

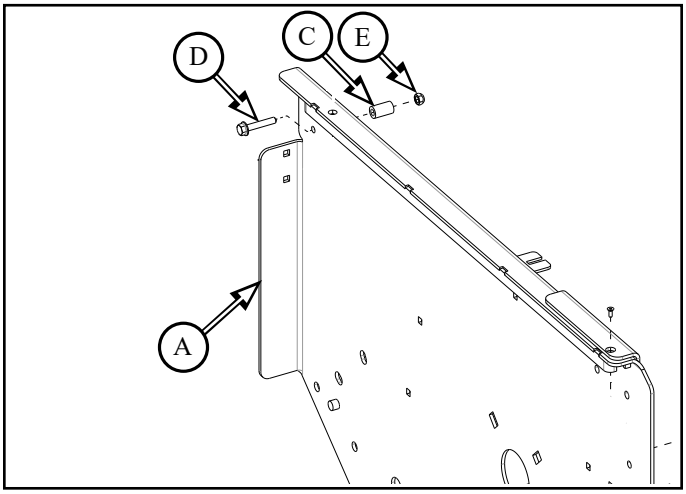




1.1.1.1 View with front floor extension (**L**) removed from chopper (**A**)

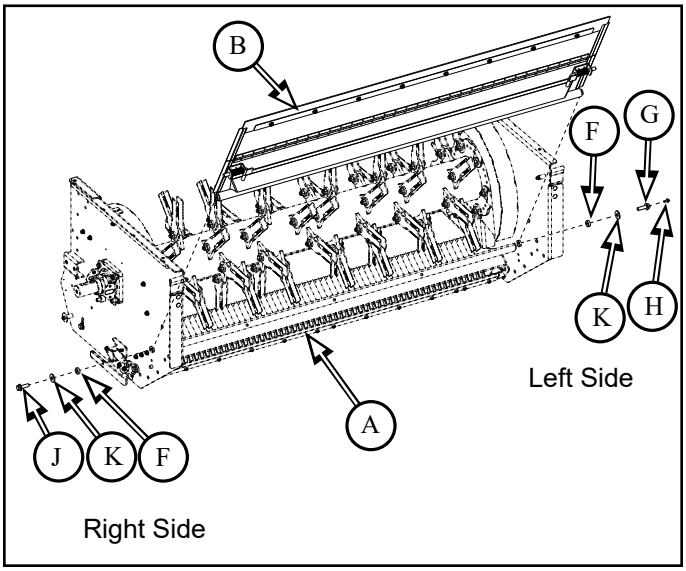


1.1.2 Install chaff door latch tube spacer (**C**) to inside of chopper wall, with:
- M8 x 45 flange head bolt (**D**)
- M8 locknut (**E**)
- repeat for other side



1.1.3 Install chaff door assembly (B), with:
right side:
- M12 x 40 flange head bolt (**J**) threaded into door
- flat washer (**K**)
- spacer (**F**)

left side:
- M12 x 40 flange head bolt w/internal thread (**G**) threaded into door
- M6 x 16 flange head bolt (**H**) threaded into (**G**)
- flat washer (**K**)
- spacer (**F**)



1.2 Sieve Extension Modification - on previously installed MAV chopper without SCU

If the Straw Chopper has previously been installed without an SCU, the following sieve extension modification will have to be completed to accomodate the SCU

If this is a new SCU installation, skip to section 1.3

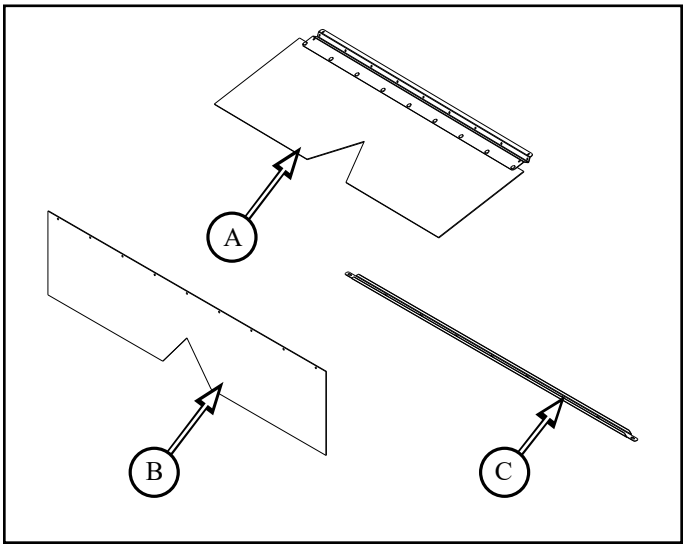
Parts List:

CH738BA Sieve Extension Assembly CR (**A**)
- installed on combine

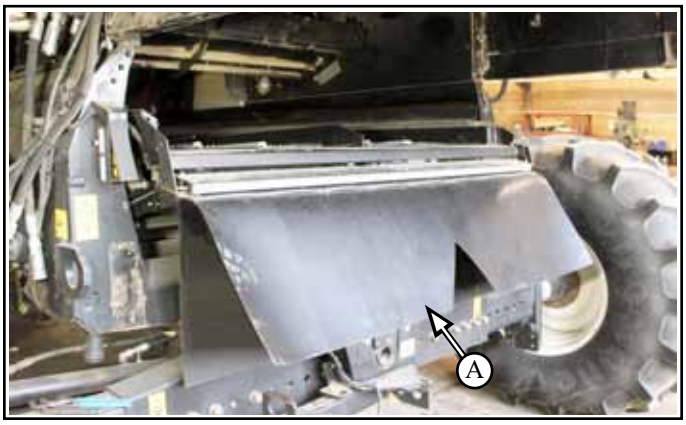
CH739-01 Sieve Extension Belting (**B**) Qty 1

CS1113B Sieve Extension Strap (**C**) Qty 1

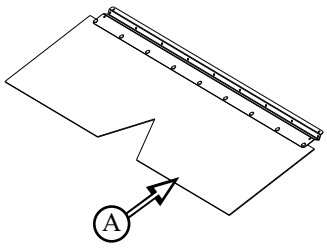
SC591S Bag Hardware

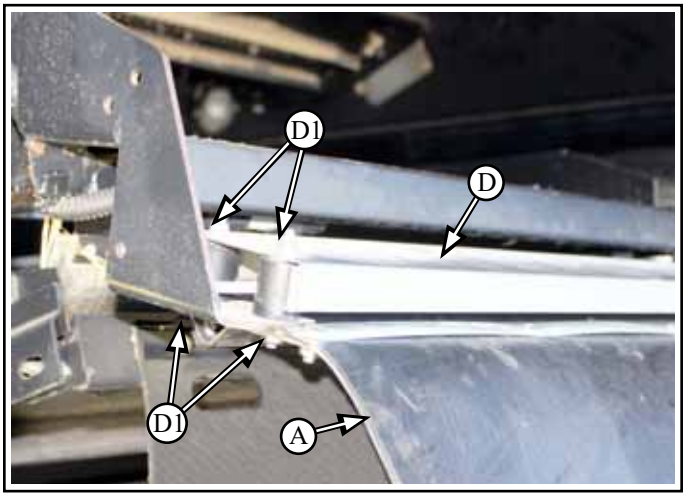


1.2.1 Remove sieve extension (**A**) from combine

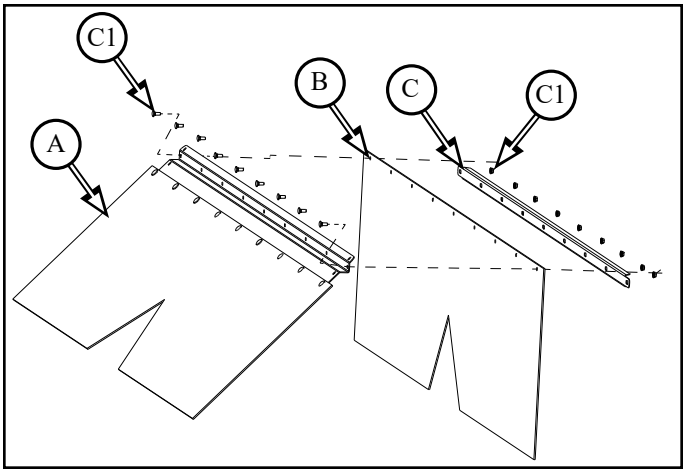


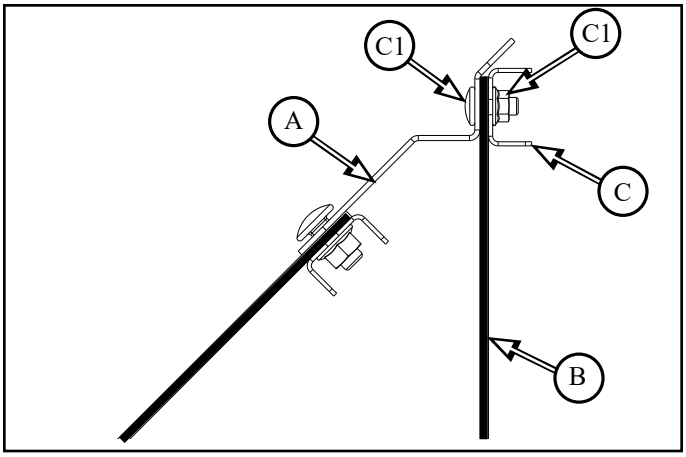
1.2.2 Remove sieve extension assembly (**A**) from the bottom of grain loss monitor (**D**) removing existing hardware (**D1**) both sides
- sieve extension and hardware to be reinstalled





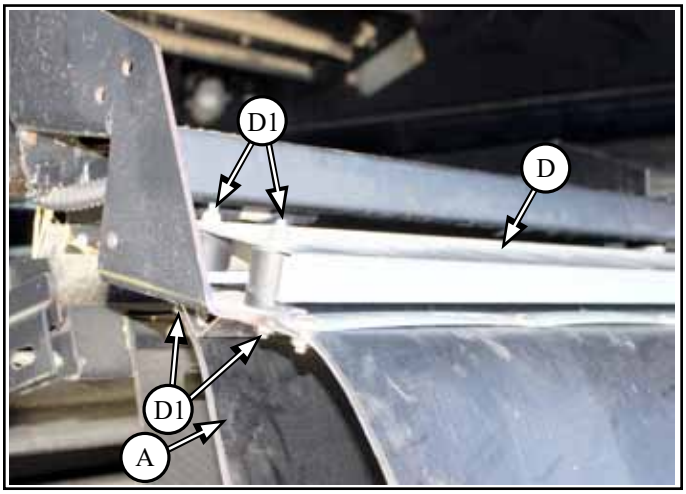
1.2.3 Install sieve extension belting (**B**) and strap (**C**) to backside of sieve extension (**A**), with:
- M6 x 16 round head bolt and flange nut (**C1**) x9





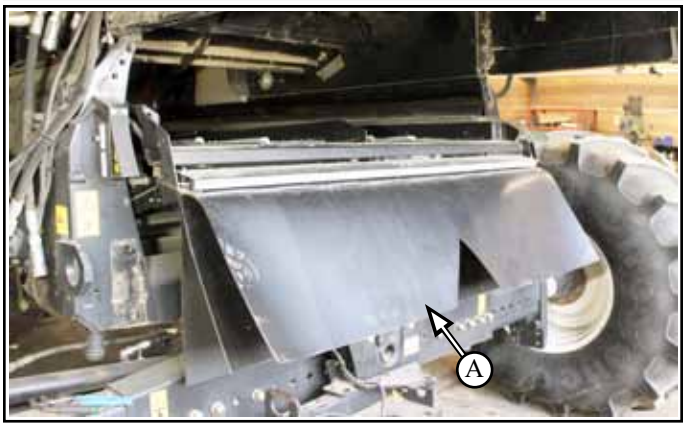
1.2.4 Reinstall sieve extension assembly (**A**) to the bottom of grain loss monitor (**D**),with:
- reuse existing hardware (**D1**) x4

** Do Not use an impact to tighten these, for they strip easily **



Do not pinch grain loss sensor wire when installing sieve extension!

1.2.5 Installed sieve extension (**A**)

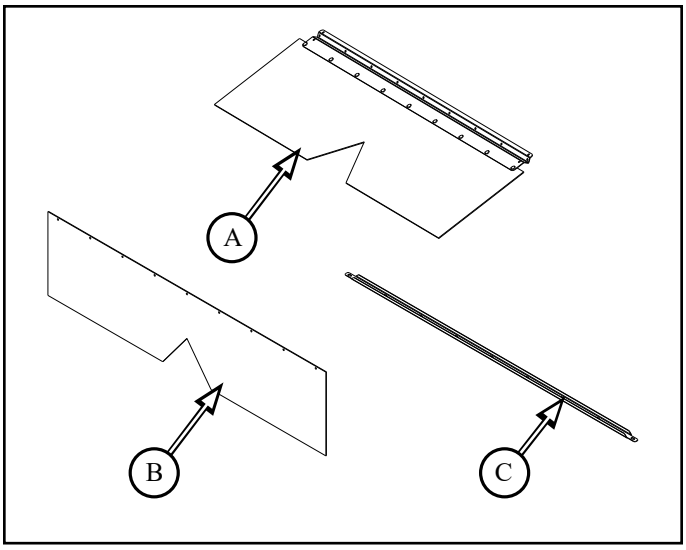


1.3 Sieve Extension Modification - on new MAV chopper installation with SCU

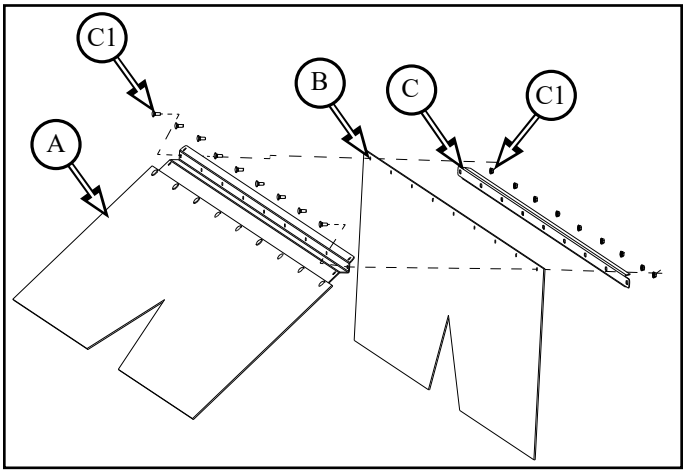
If this is a new Straw Chopper installation with a SCU, the following sieve extension modification will have to be completed to accomodate the SCU.

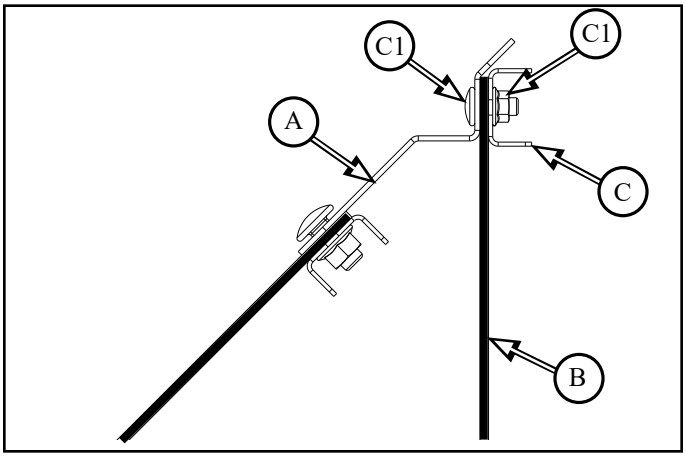
Parts List:

CH738BA Sieve Extension Assembly CR (**A**) Qty 1
- included with MAV chopper shipping components
CH739-01 Sieve Extension Belting (**B**) Qty 1
CS1113B Sieve Extension Strap (**C**) Qty 1
SC591S Bag, Mount Hardware

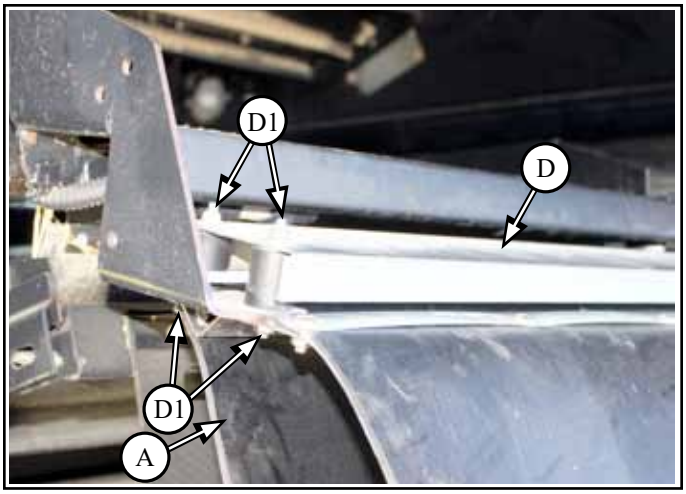


1.3.1 Install sieve extension belting (**B**) and strap (**C**) to backside of sieve extension (**A**), with:
- M6 x 16 round head bolt and flange nut (**C1**) x9

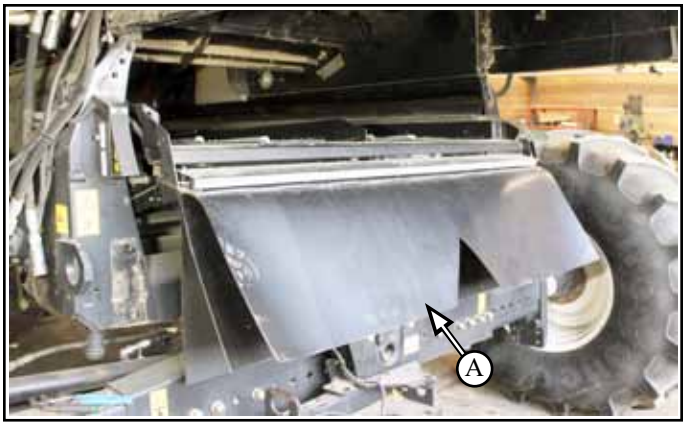




1.3.2 Install sieve extension assembly (**A**) to the bottom of grain loss monitor (**D**),with:
- reuse existing hardware (**D1**) x4
** Do Not use an impact to tighten these, for they strip easily **



Do not pinch grain loss sensor wire when installing sieve extension!

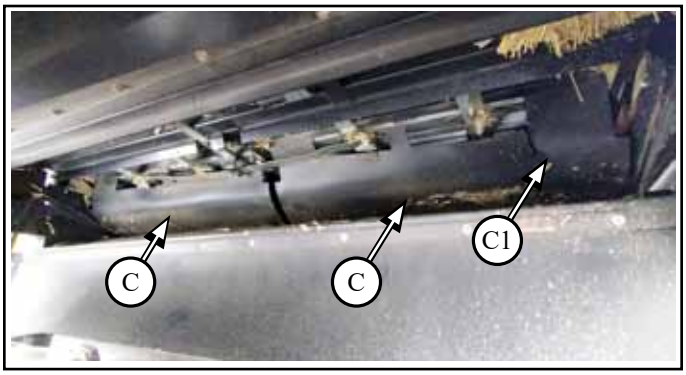


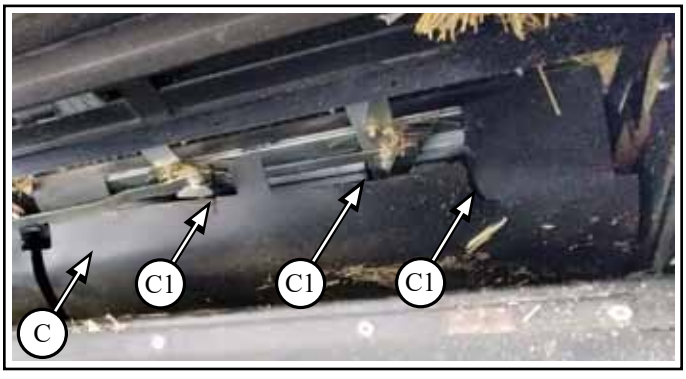
1.3.4 Installed sieve extension (**A**)

1.4 OEM Upper Sieve Seal

1.4.1 Check if OEM upper sieve seals (**C**) are worn out or damaged (**C1**). These prevent chaff and weed seeds from dropping onto the ground

1.4.2 If they need replacing, order and install Upper Sieve Seal Kit SC1642K (small grains) or SC1643K (corn)





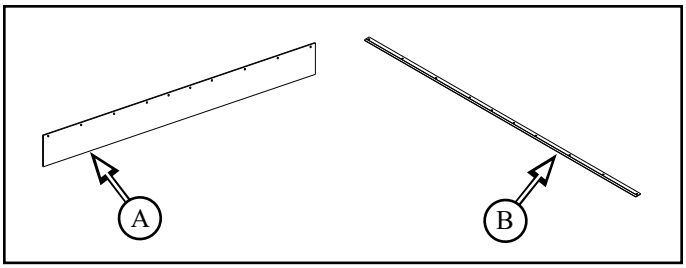
1.5 OEM Rear Shoe Seal Installation

These parts are only required if the OEM rear shoe seal is not in place or is damaged

Parts List:

SC1640-01	Rear Shoe Seal (**A**)	Qty 1
SC1641B	Rear Shoe Seal Strap (**B**)	Qty 1

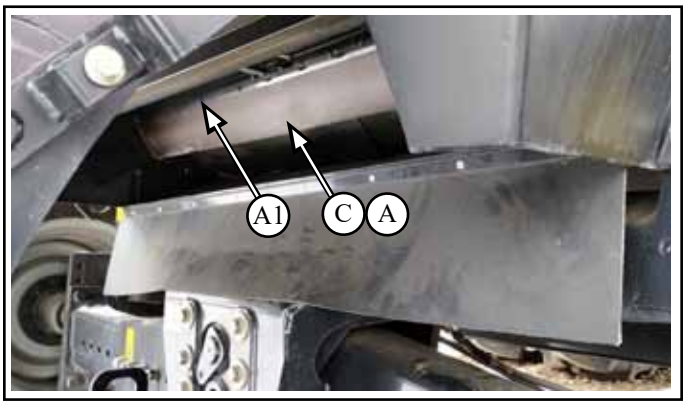
SC1641S Hardware Bag



If OEM rear shoe seal is damaged:

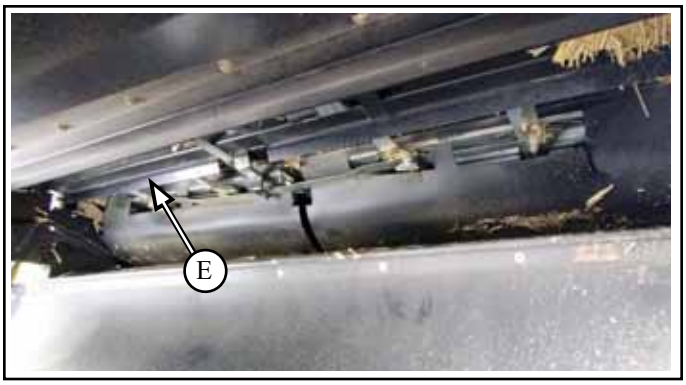
1.5.1 Remove OEM rear shoe seal (**C**)

1.5.2 Install new rear shoe seal (**A**), with:
- rivets (**A1**)
- ensure to reuse the OEM strap (**D**)

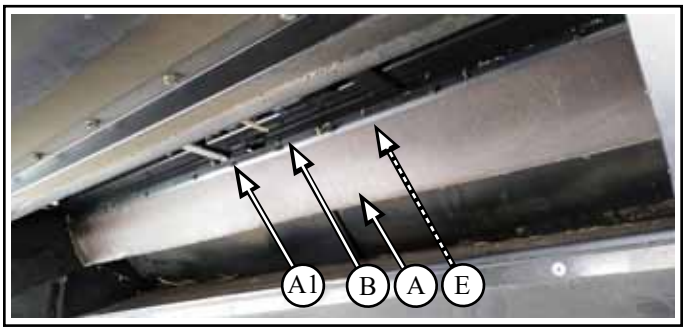


If OEM rear shoe seal is not in place:

1.5.3 If OEM rear shoe seal is not in place, the mounting frame (**E**) will be empty



1.5.3 Install new rear shoe seal (**A**) and strap (**B**) to the mounting frame (**E**), with:
- rivets (**A1**)
- ensure textured side of seal (**A**) is facing rearwards
- ensure seal (**A**) is sandwhiched between frame (**E**) and strap (**B**)

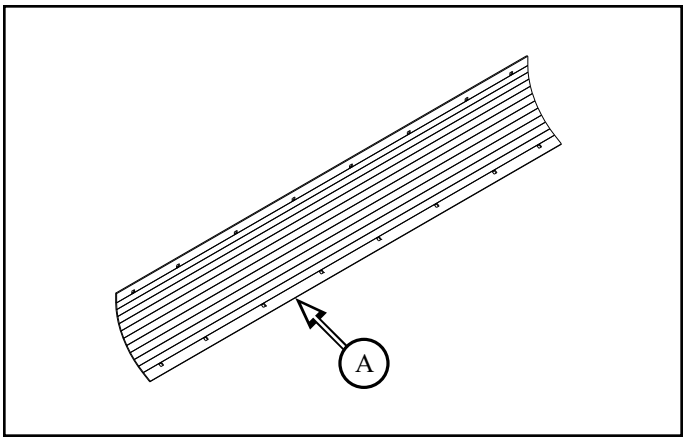


1.6 OEM Beater Floor Cover Installation

If this is already installed on machine, skip this step.
Otherwise install

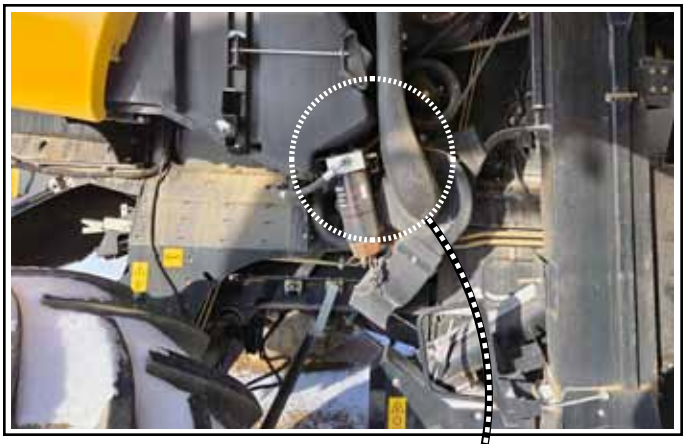
Parts List:
SC1656B CR Beater Floor Cover (**A**) Qty 1

SC1656S Hardware Bag

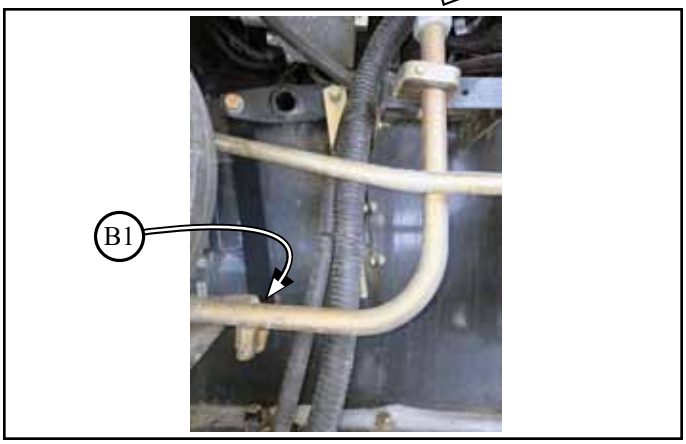


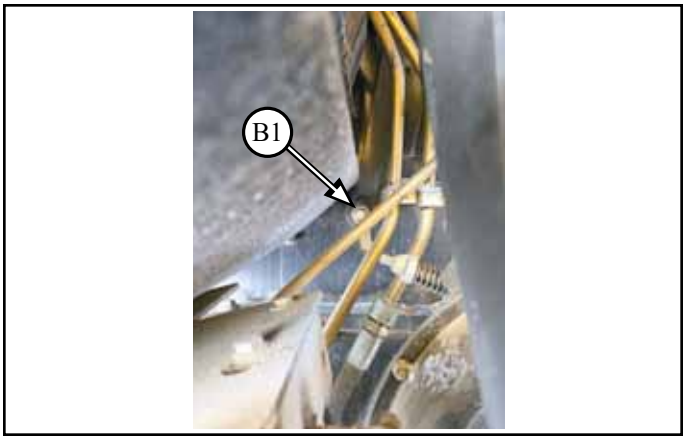
1.6.1 Remove OEM beater floor (**B**) rear mounting hardware (**B1**)
- both sides
- mounting hardware (**B1**) to be reused

Left Side Overview

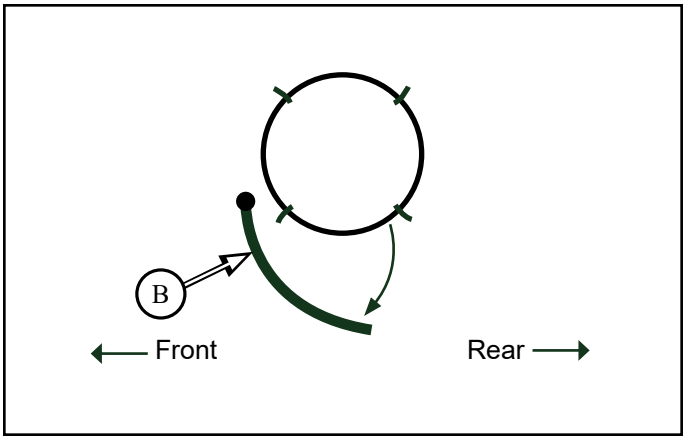


Right Side Overview

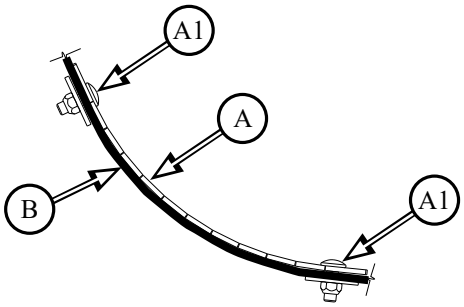


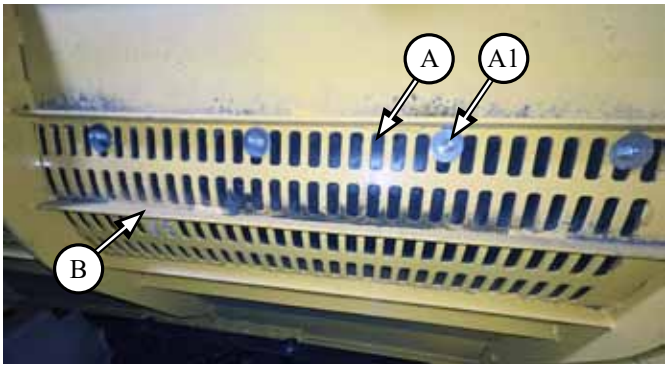


1.6.2 Rotate OEM beater floor (**B**) down so the front of beater grate is accessable



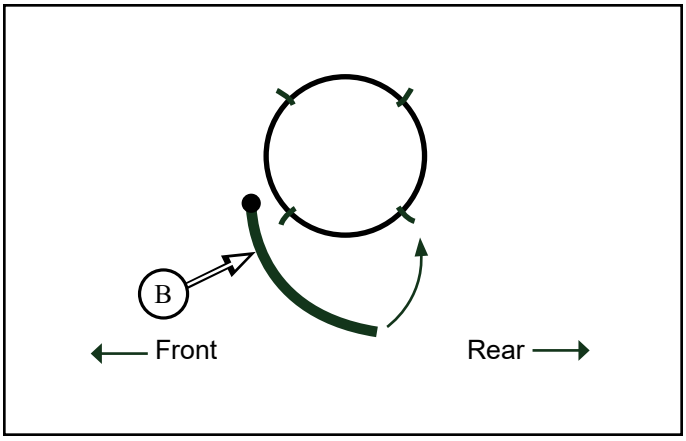
1.6.3 Install beater floor cover (**A**), with:
- M8 x 25 round head bolt, flat washer and lock nut (**A1**) x16
- align cover (**A**) so that it covers all the slots in the grates of the beater floor (**B**)



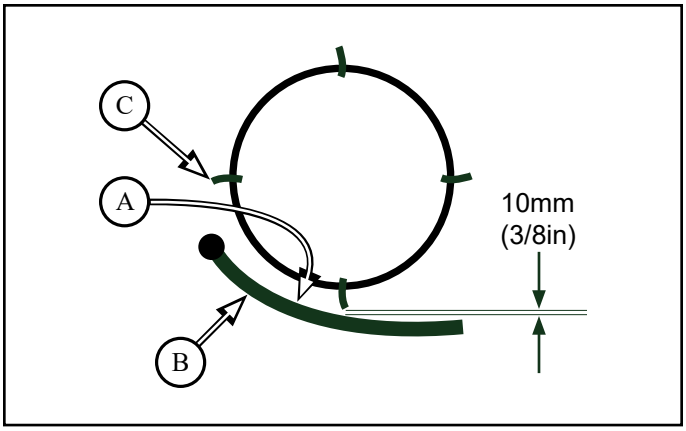


Underside of Beater Floor

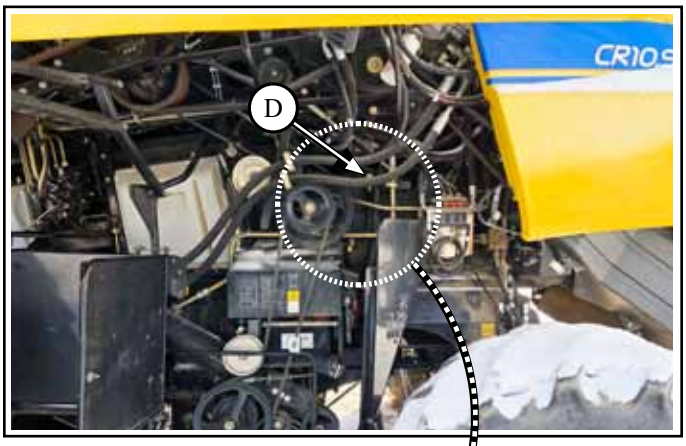
1.6.4 Rotate beater floor (**B**) back up into place and secure, with
- reuse mounting hardware (**B1**) as referenced in step 1.6.1
- both sides



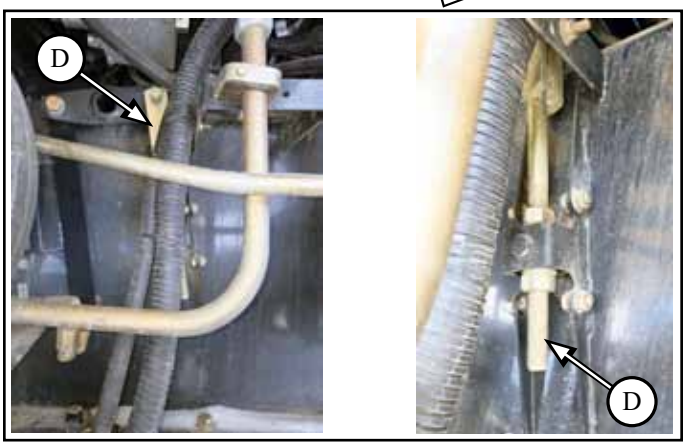
1.6.5 Adjust beater floor (**B**) so that the beater tines (**C**) are 10mm (.375 in) from the beater floor cover (**A**)



1.6.5.1 Adjust distance of beater floor (**B**) to tine with adjustment screw (**D**) on left side



Left Side Overview



1.7 Chopper Drive Sheave Installation- if MAV chopper has already been installed without a SCU

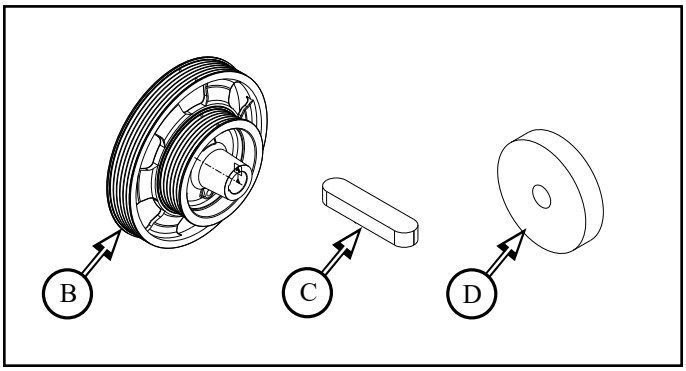
If the Straw Chopper has previously been installed without an SCU, the following drive sheave modification will have to be completed to accomodate the SCU

If this is a new SCU installation, skip to section 1.5

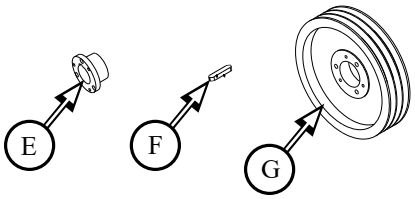
Parts List:

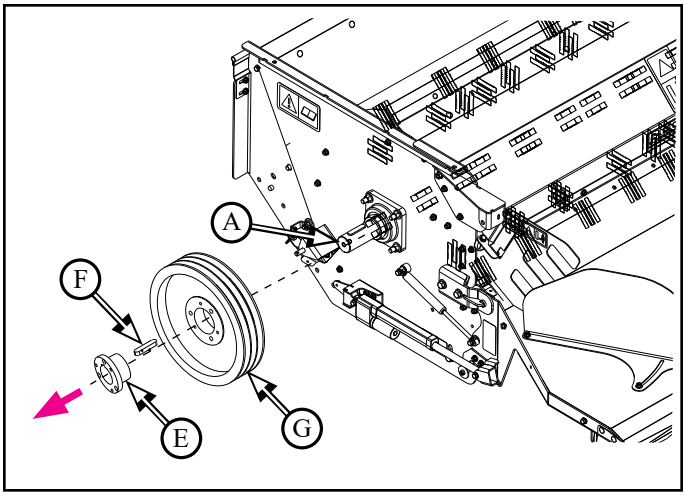
With SCU installed:

RP1138	Sheave 6M 16 pd / 9.5 pd (**B**)	Qty 1
323624	Key (**C**)	Qty 1
CS777Z	Heavy Duty Washer (**D**)	Qty 1
	Bag, Mount Hardware (attached to sheave)	

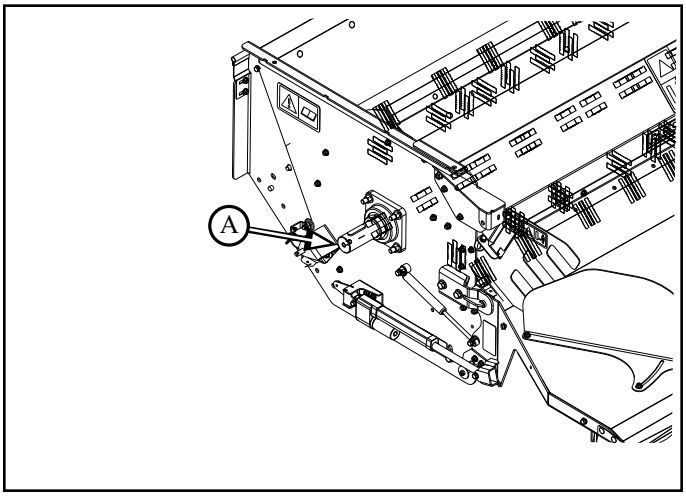


1.7.1 Remove 3Bx11 drive sheave (**G**) from chopper drive shaft (**A**)
- includes busing (**E**) and key (**F**)
- not to be reused



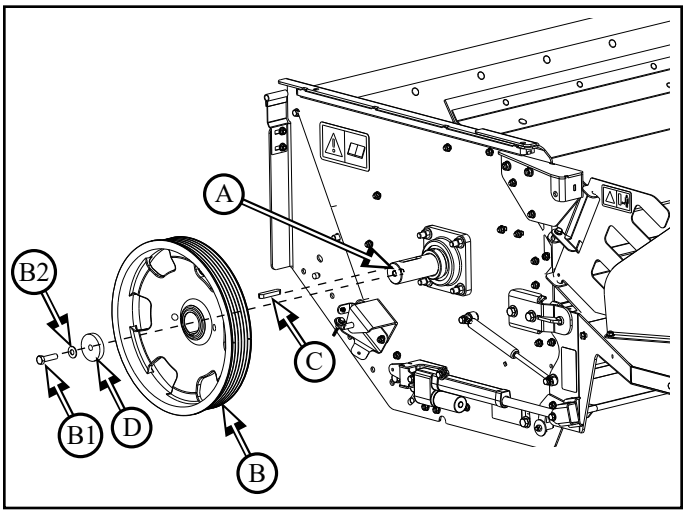


1.7.1.1 Drive sheave removed



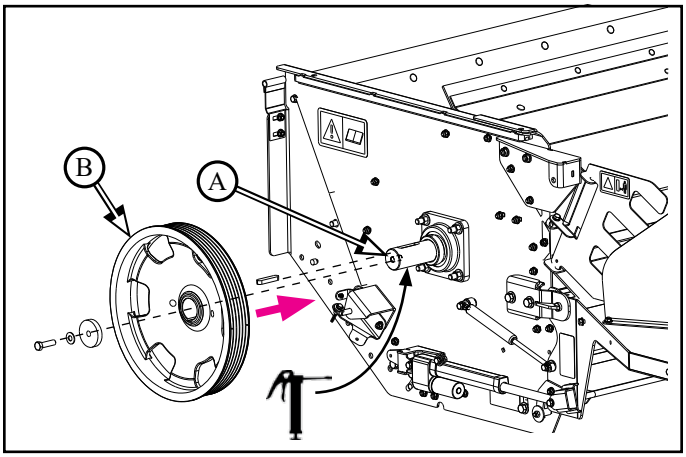
1.7.2 Install sheave (**B**) to chopper shaft (**A**), with:
- ensure key (**C**) is in place
- heavy duty washer (**D**)
- M12 x 45 hex head bolt (**B1**)
- M12 belleville washer (**B2**)

Follow the procedures below:

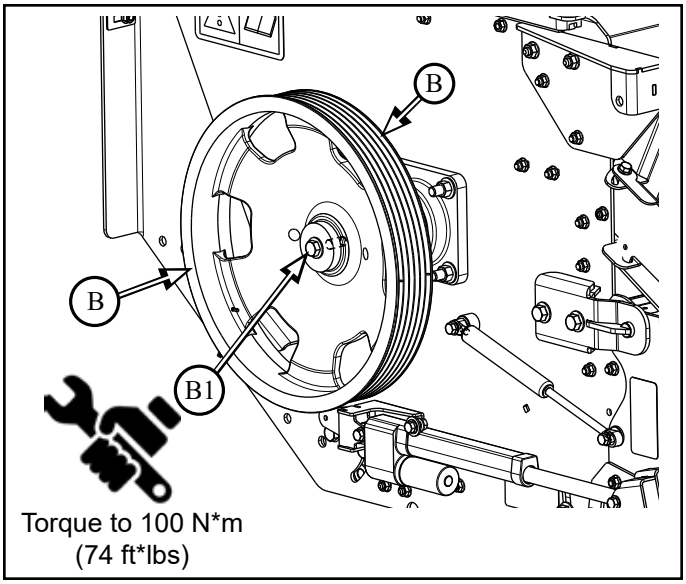


1.7.3 Apply grease to chopper shaft (**A**)

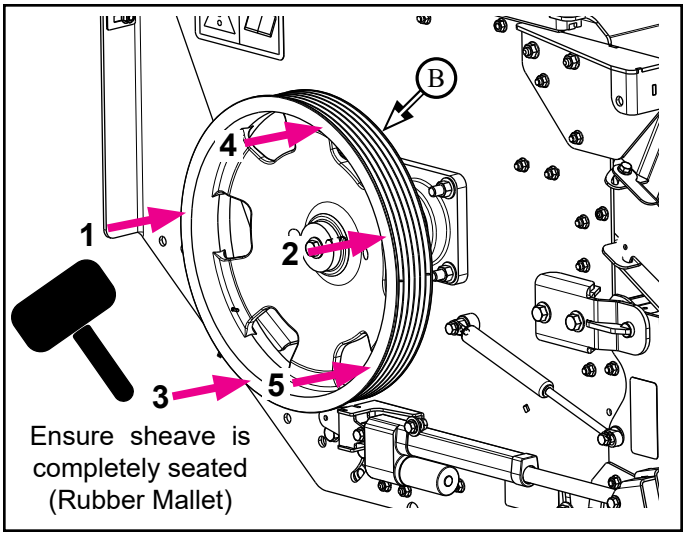
1.7.3.1 Install sheave (B), with:
- key (**C**), heavy duty washer (**D**), belleville washer (**B2**) and bolt (**B1**)



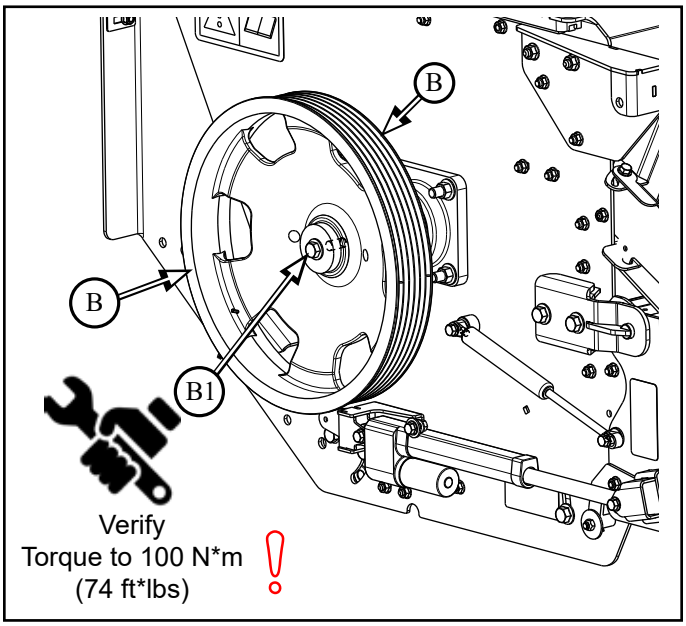
1.7.4 Torque (**B1**) to 100 N*m (74 ft*lbs)



1.7.5 Tap sheave (**B**) lightly with a rubber mallet in sequence shown to completely seat in place



1.7.6 Verify torque (**B1**)

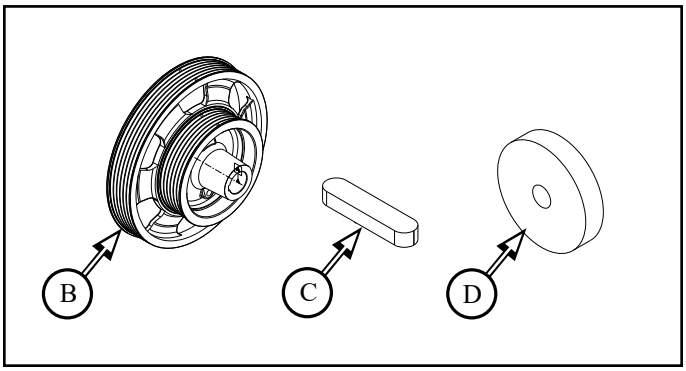


1.8 Chopper Drive Sheave Installation - if this is a new MAV chopper installation with a SCU

If this is a new MAV Straw Chopper installation with a SCU, the following drive sheave installation will have to be completed to accomodate the SCU.

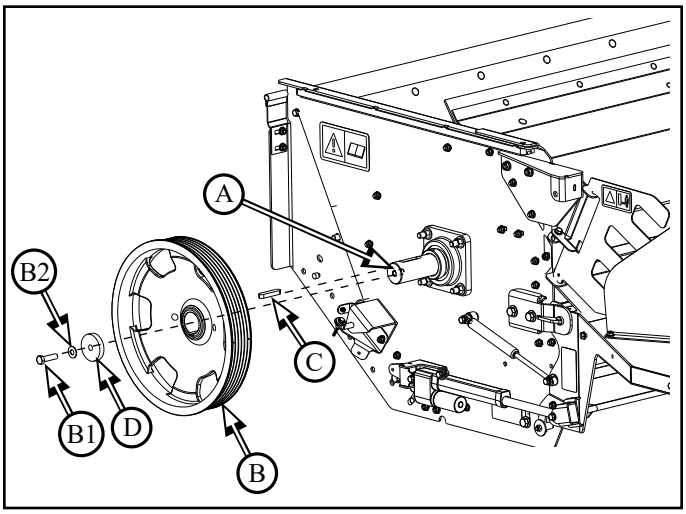
Parts List:
With SCU installed:

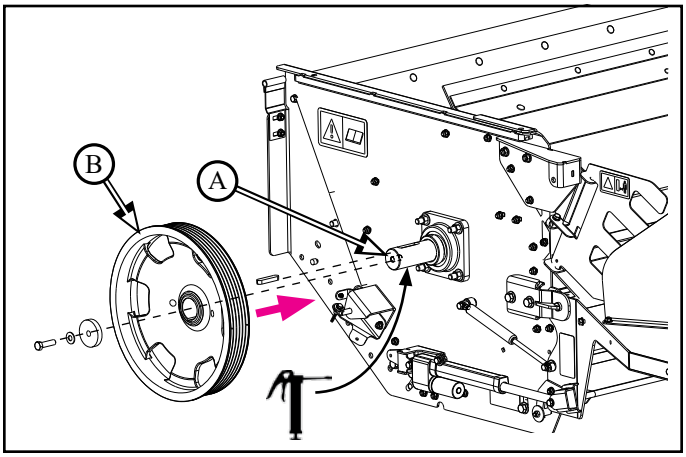
RP1138	Sheave 6M 16 pd / 9.5 pd (**B**)	Qty 1
323624	Key (**C**)	Qty 1
CS777Z	Heavy Duty Washer (**D**)	Qty 1
	Bag, Mount Hardware (attached to sheave)	



1.8.1 Install sheave (**B**) to chopper shaft (**A**), with:
- ensure key (**C**) is in place
- heavy duty washer (**D**)
- bolt (**B1**)
- flat washer (**B2**)

Follow the below procedures:

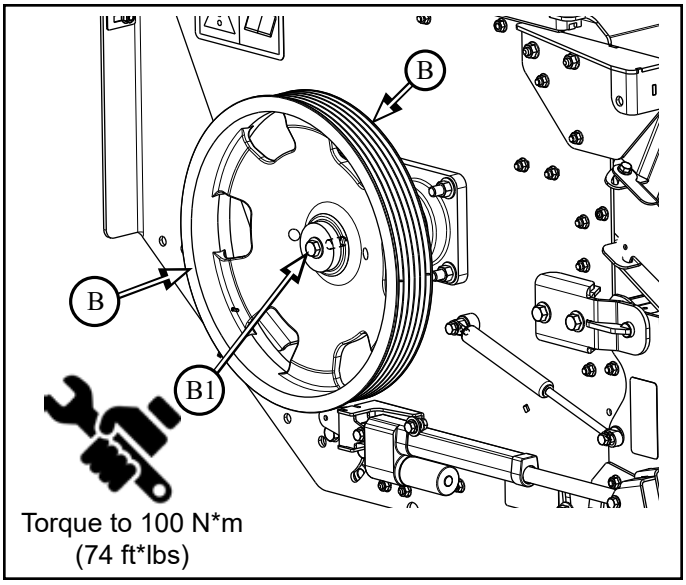




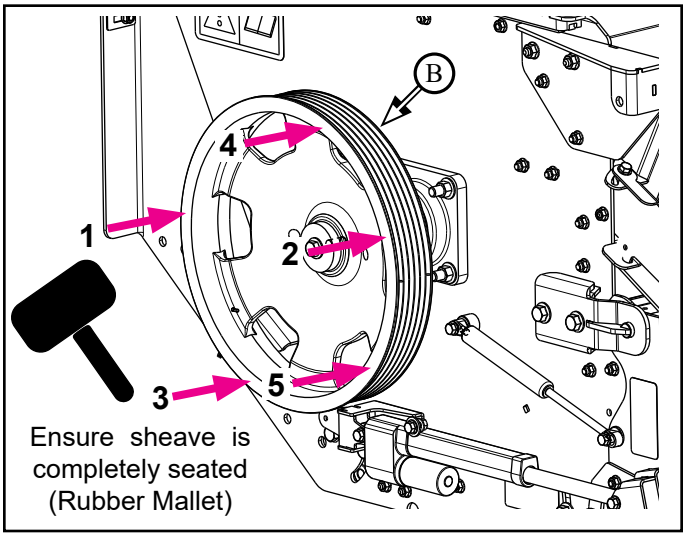
1.8.2 Apply grease to chopper shaft (**A**)

1.8.2.1 Install sheave (**B**), with:
- key (**C**), heavy duty washer (**D**), belleville washer (**B2**) and bolt (**B1**)

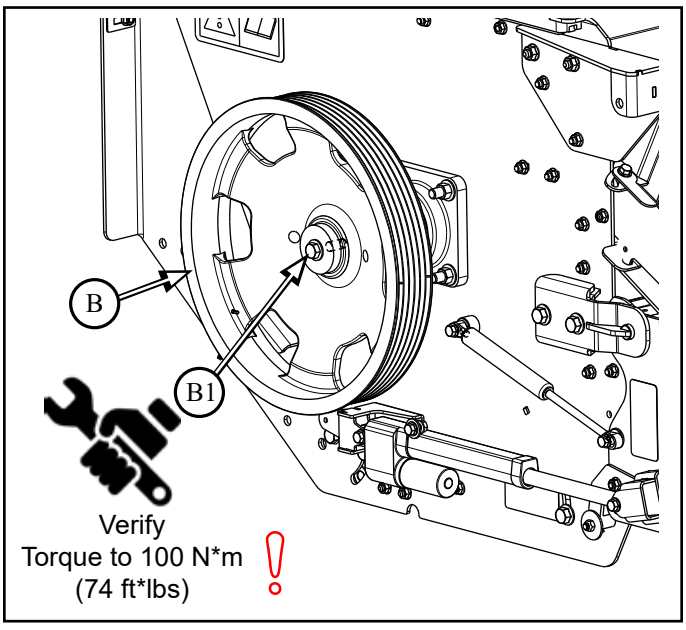
1.8.3 Torque (**B1**) to 100 N*m (74 ft*lbs)



1.8.4 Tap sheave (**B**) lightly with a rubber mallet in sequence shown to completely seat in place



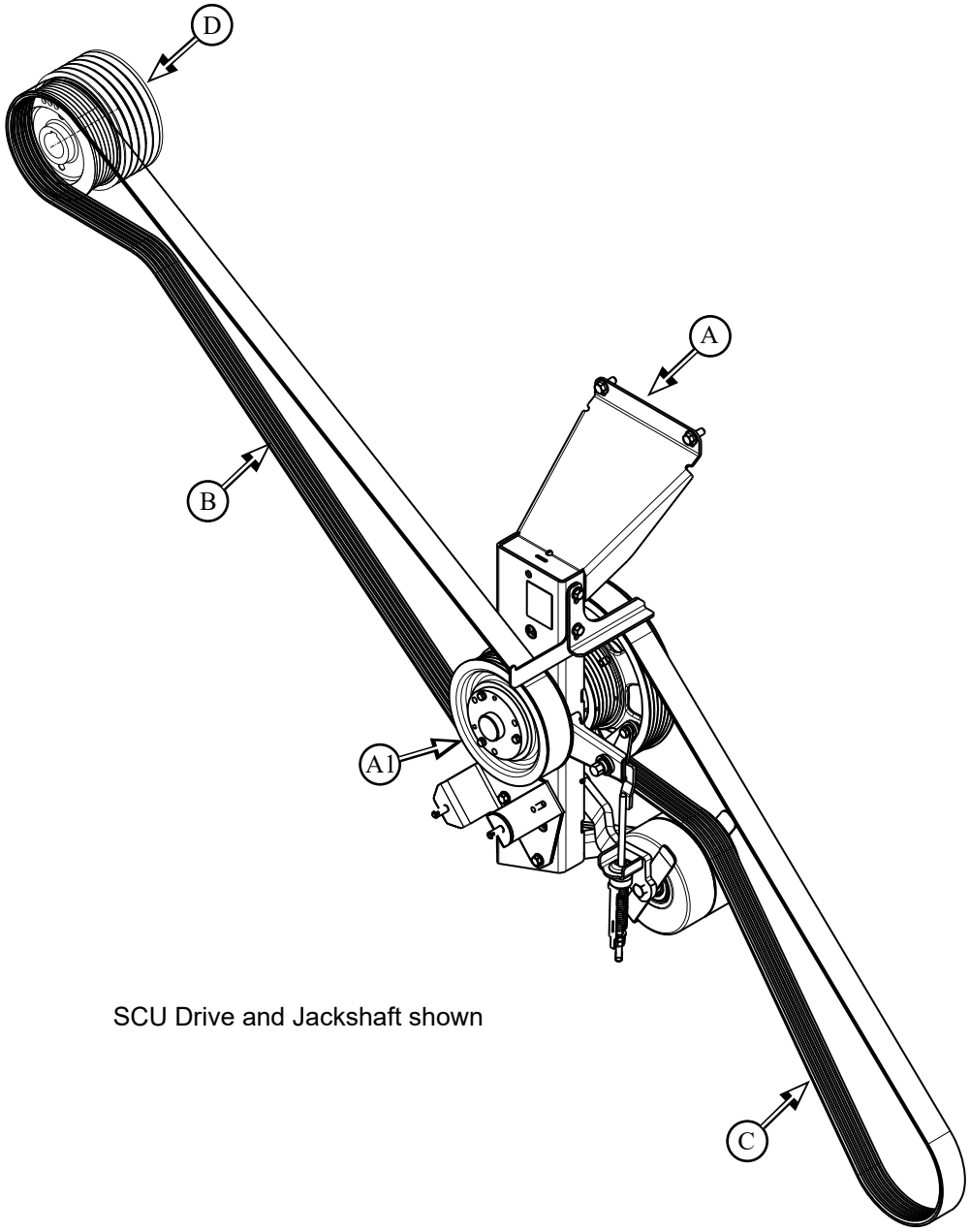
1.8.5 Verify torque (**B1**)



1.9 Chopper Drive & Jackshaft Installation

Parts List:

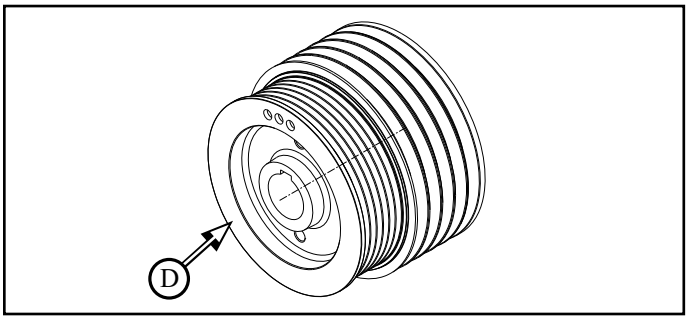
CH696BA	Jackshaft CR 6M Assy **(A)**	Qty 1
BE6M128K	VBelt 6M 128L Kevlar **(B)**	Qty 1
BE6M122K	VBelt 6M 122L Kevlar **(C)**	Qty 1
RP1220	Sheave CR PTO M Driver **(D)**	Qty 1



SCU Drive and Jackshaft shown

1.9.1 6M PTO Drive Sheave Installation

Parts List:
RP1220 Sheave CR PTO 6M Drive **(D)** Qty 1

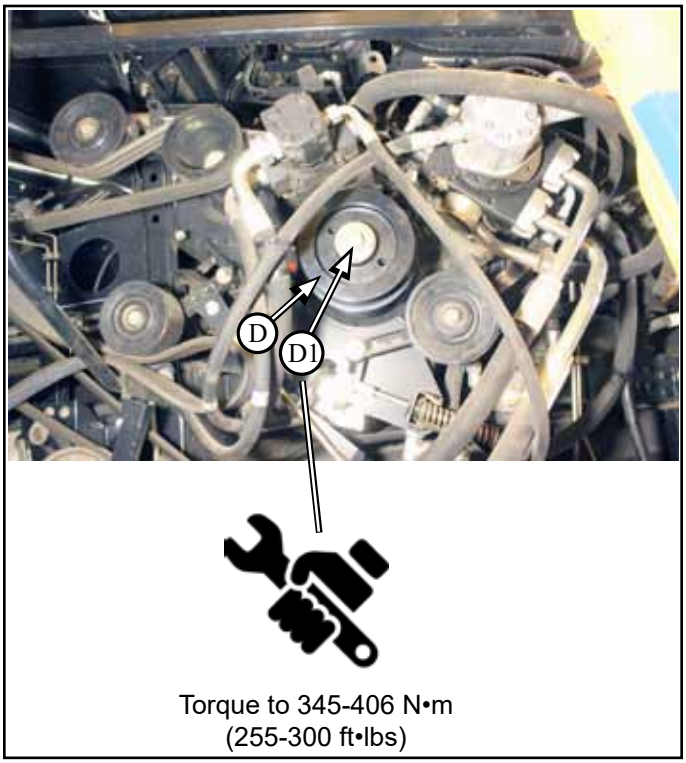


1.9.1.1 Factory sheave and drive belt have been previously removed in disassembly manual

1.9.1.2 Install new 6M Driver Sheave (**D**) with:
- M grooves outward
- existing hardware (**D1**)
- ensure key is in place

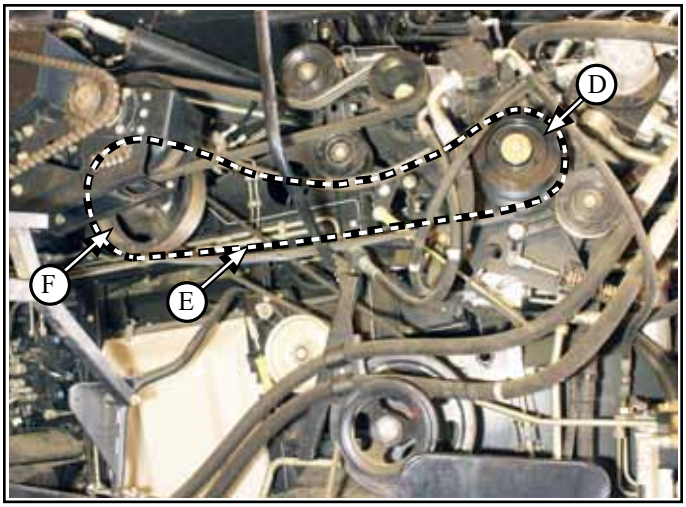
1.9.1.2.1 Torque bolt **(D1)** to 345-406 N-m (255-300 ft-lb) Then firmly tap the sheave with a rubber mallet and torque again.

Do Not use impact gun!
This bolt can be easily torqued off



Torque to 345-406 N•m
(255-300 ft•lbs)

1.9.1.3 Reinstall OEM drive belt (**E**) onto inner grooves of new sheave (**D**) from PTO sheave (**F**)

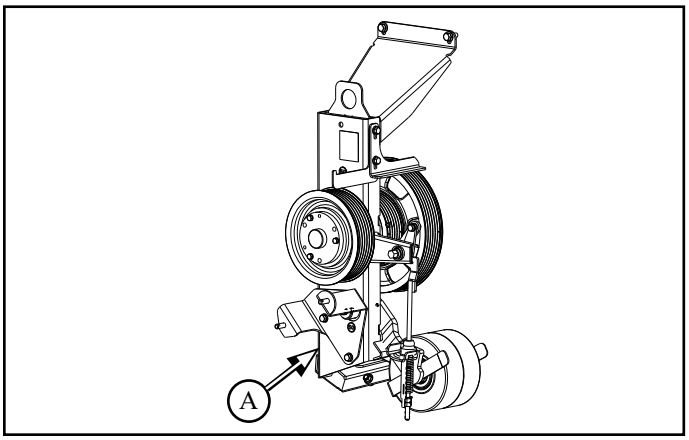


1.9.2 Jackshaft 6M Installation

Parts List:

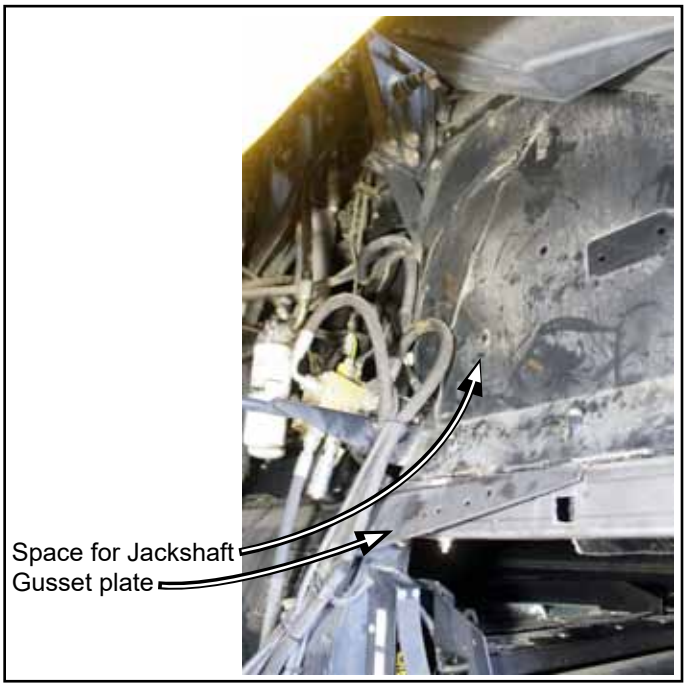
CH696BA Jackshaft CR 6M Assy **(A)** Qty 1

SC696S Hardware Bag



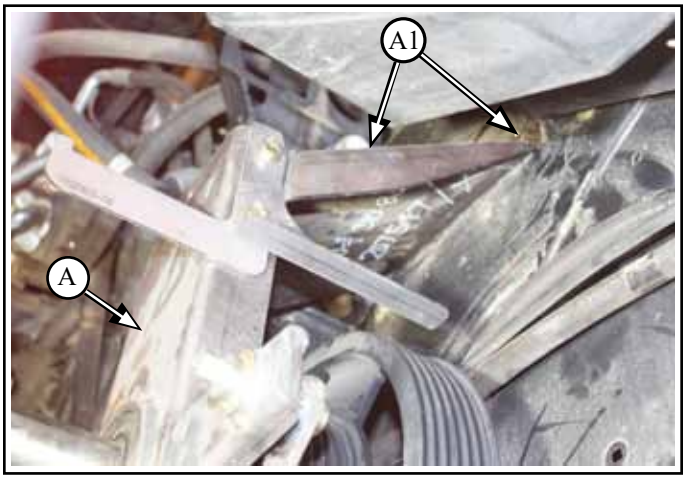
1.9.2.1 Lift Jackshaft (**A**) into place on left rear combine wall, in front of left rear tire

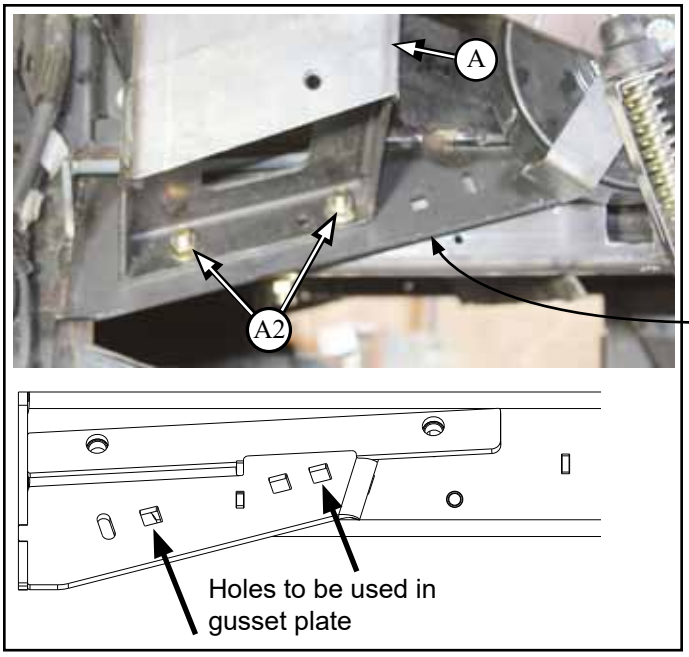
Heavy - Use Hoist or Lifting Device



1.9.2.2 Top of jackshaft to be installed onto upper side wall with:
- M12 x 30 flange bolt and flange nut (**A1**) x2
  - bolts to be mounted from inside of combine wall
  - Threads to the outside

1.9.2.3 Bottom of jackshaft to be installed onto gusset plate of interface with:
- M12 x 30 flange bolt and flange nut (**A2**) x2





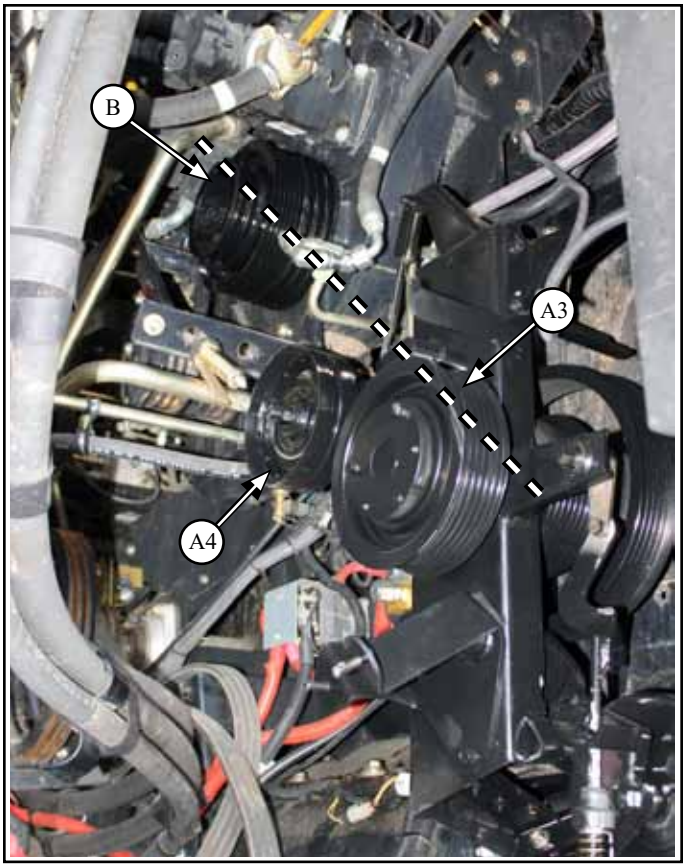
1.9.3 Jackshaft Alignment

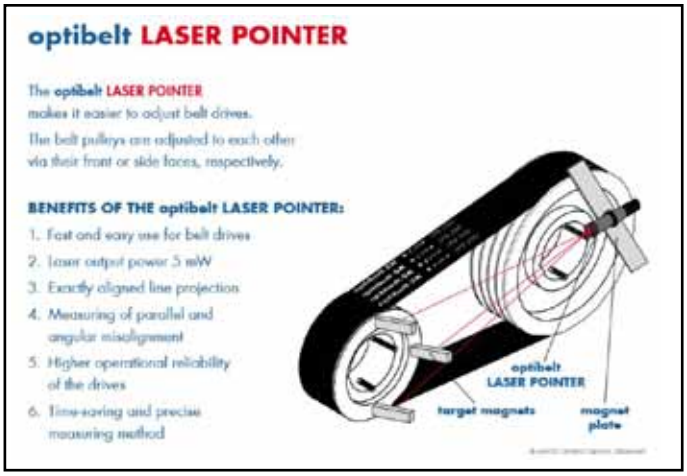
1.9.3.1 Align Jackshaft Sheave
- Align the Jackshaft Outter Sheave **(A3)** to the Combine PTO Sheave **(B)** with laser alignment tool

Note: Laser Alignment Kit can be purchased from Redekop if required. Part # RP956

- Alignment can be corrected by adjusting the top or bottom jackshaft mounts with a shim
- Alignment can be corrected by adjusting the distance of the sheave (**A3**) from the jackshaft as necessary
- adjust idler wheel **(A4)** alignment if necessary
- Once the Sheaves are aligned, tighten sheaves and mounting hardware

See following instructions for aligning the jackshaft





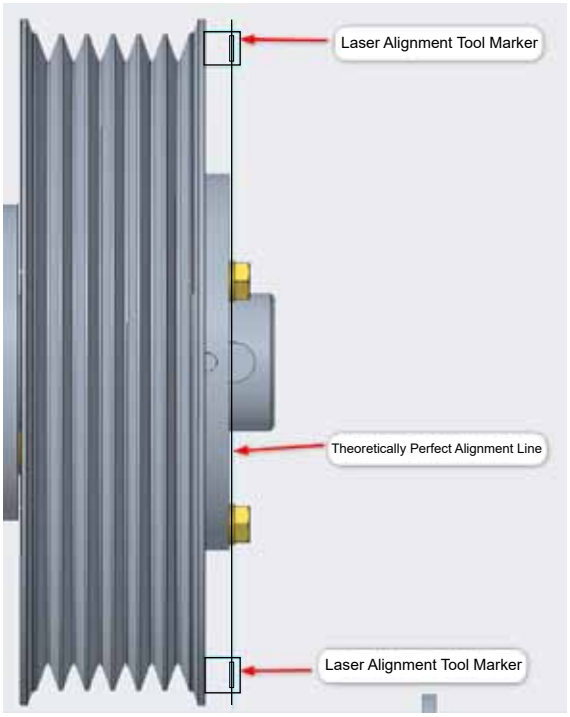
1.9.3.2 Place laser alignment tool onto PTO sheave on combine and place two markers included with kit on the outside edge of the jackshaft sheave.

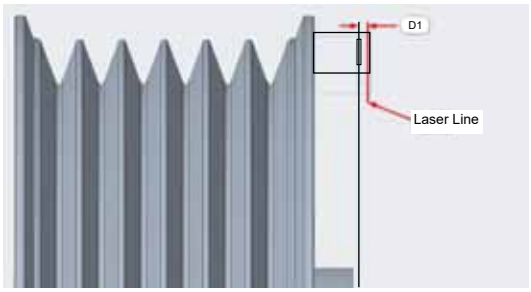
1.9.3.3 Check to see if one of the two tabs is aligned with laser at some angle of rotation of the sheave by spinning sheave around slowly. Laser should go through center indicator when aligned. If neither marker is aligned, adjust sheave so one of them is aligned. Tapered bushing has procedure to mount correctly, refer to instructions for proper procedure.

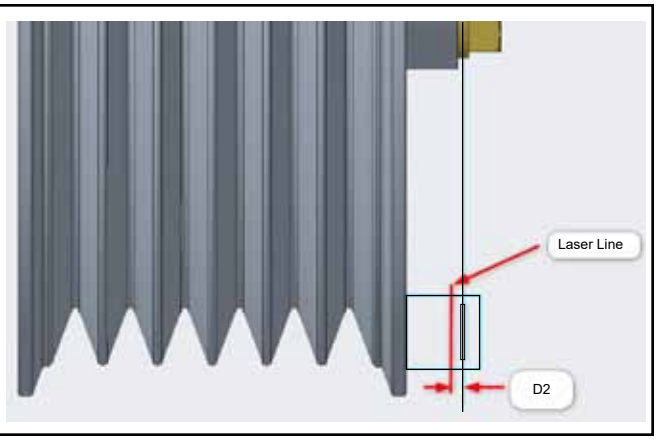
1.9.3.4 Spin sheave around slowly to find where laser is the farthest from the center indicator on one marker. Once this is found, stop sheave and mark angular rotation.

1.9.3.5 With sheave in most misaligned position, place other marker 180 deg (directly across sheave diameter) from original marker.

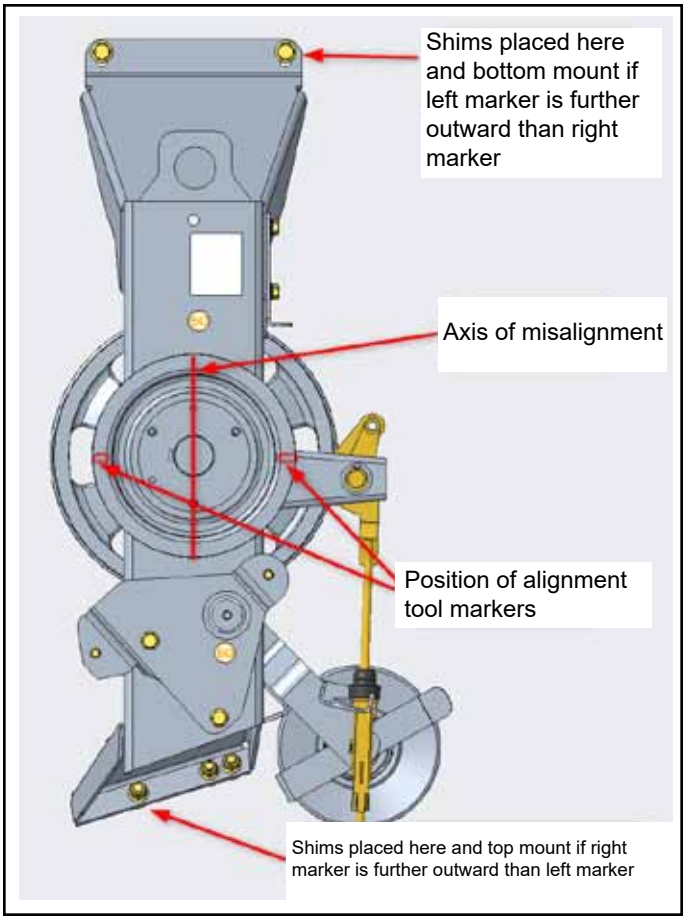
1.9.3.6 Measure total misalignment of sheave in this location by adding the sum of D1 and D2 together. This number cannot exceed 5/32 or 4mm. Note that D1 and D2 can be inverted from the pictures below, should always be opposite of each other, or zero. If the laser line is on the same side of each center indicator, the sheave must be aligned along the shaft until the laser line is centered on the marker.







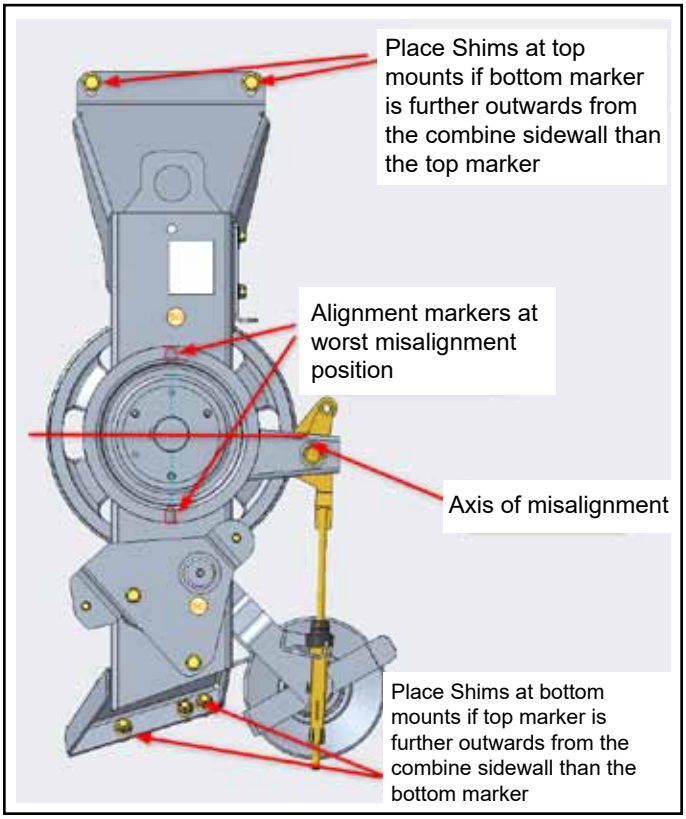
1.9.3.7 If this measurement is exceeded, shims will be required to correct the misalignment. Standard washers can be used as shims between jackshaft mounting surface and the combine wall. See below for general guidelines on washer placement to correct misalignment.



1.9.3.8 If axis of misalignment is in-between the above diagrams, then shims will need to be placed in corner opposite to the axis of misalignment.

1.9.3.9 Once shims are placed, re-peat all steps to check if alignment is within tolerance.

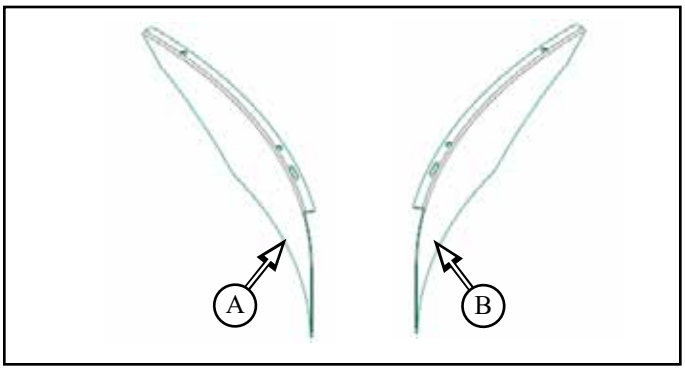
1.9.3.10 Contact Redekop dealer if unable to properly align jackshaft.



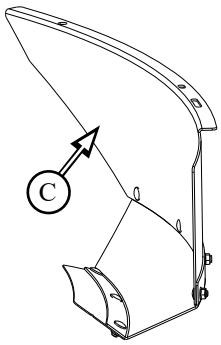
1.10 Tailboard Fin Modification

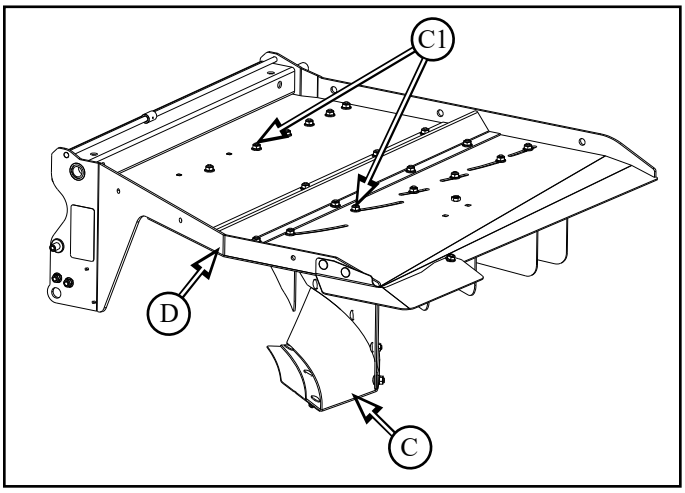
Parts List:

CG732GL	Fin Crv 40L SCU Lt (**A**)	Qty 1
CG732GR	Fin Crv 40L SCU Rt (**B**)	Qty 1

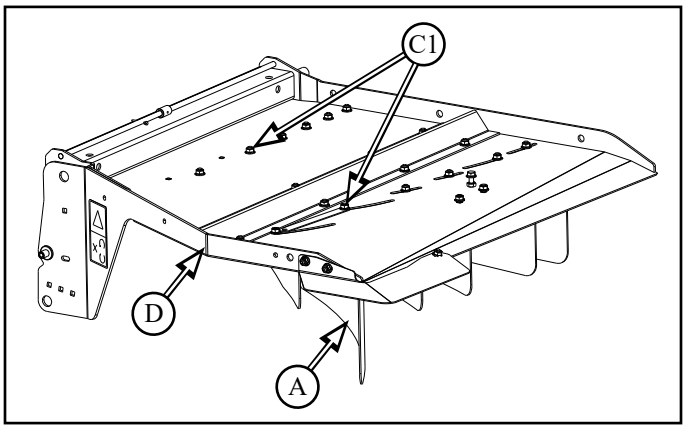


1.10.1 Remove existing wide spread scooped fin assembly (**C**) from tailboard (**D**)
- hardware (**C1**) to be reused for new fins
- discard existing fin assembly (**C**)
- both sides



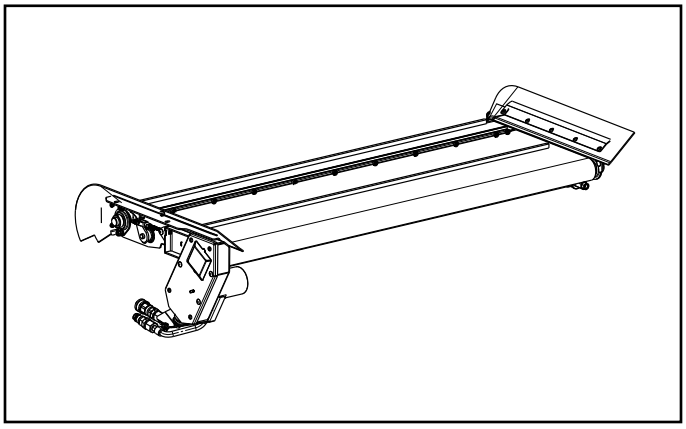


1.10.2 Install new wide spread fin (**A**) to tailboard (**D**) at same location as fin assembly (**C**) previously removed
- reuse hardware (**C1**)
- both sides



2 Anit Plugging Conveyor Installation

2.1 Install anti plugging conveyor at this stage of the installation. Refer to installation manual with the converyor package.

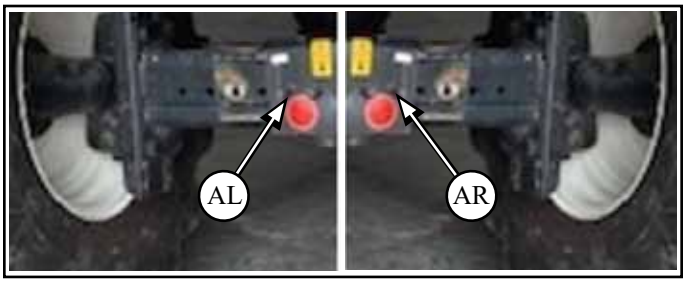


3 Seed Control Unit Installation

3.1 Rear Axle Spacing

3.1.1 Ensure rear axles (**AL** & **AR**) are positioned for 3.3 metre spacing:
- left axle mounted at 5th hole (**AL**)
- right axle mounted at 5th hole (**AR**)

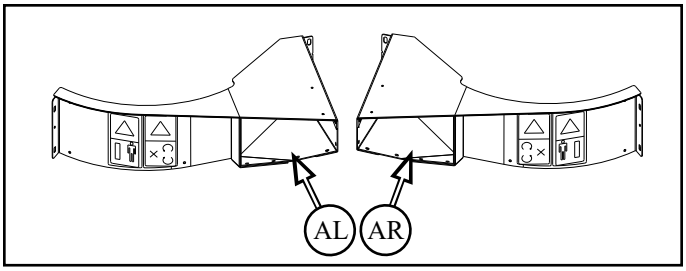
Adjust accordingly



3.2 Discharge Outlet Installation

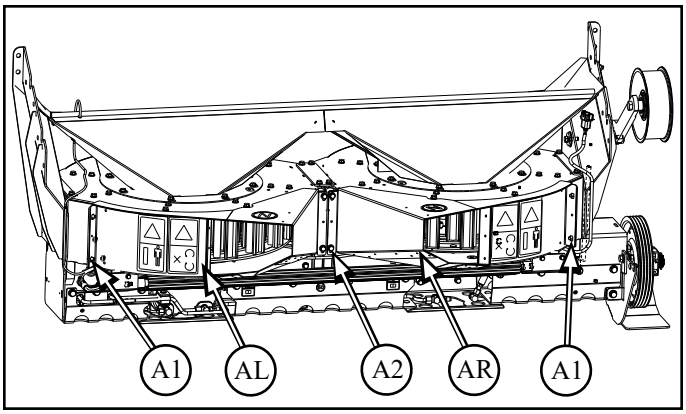
Parts List:

SC180BAL	Discharge Outlet Vane TB (**AL**)	Qty 1
SC180BAR	Discharge Outlet Vane TB (**AR**)	Qty 1
SC435S	Bag, Mount Hardware	



3.2.1 Install left discharge outlet (**AL**) to SCU housing with:
- M8 x 20 round head bolt and flange nut (**A1**) x2
- M8 x 20 flange head bolt (**A2**) x2

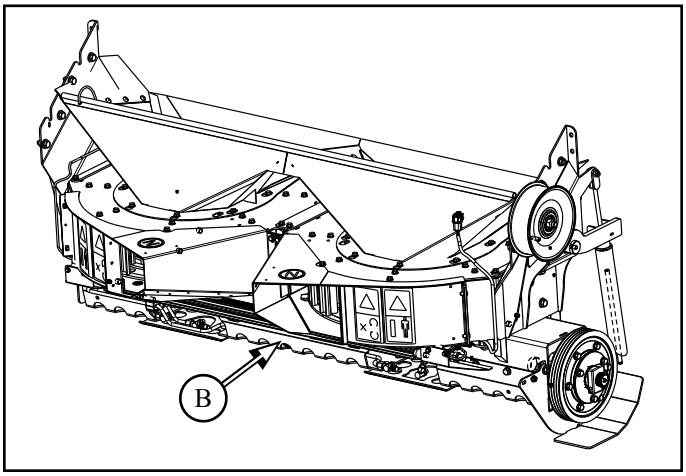
- repeat for other side



3.3 Seed Control Unit Installation

Parts List:

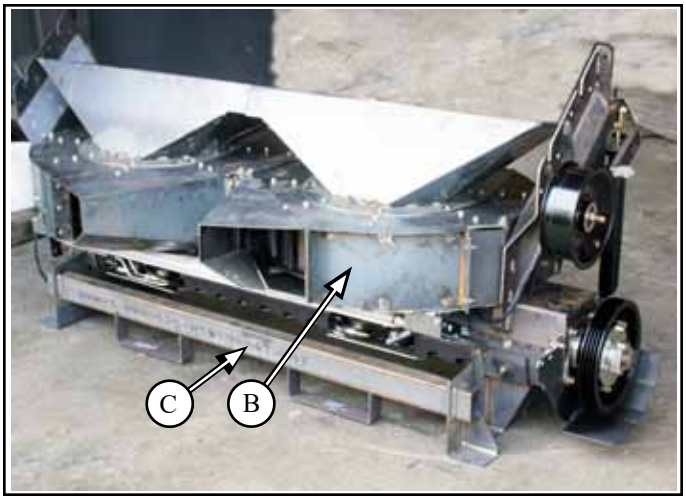
SC555BA	Seed Control Unit Assembly CR (**B**)	Qty 1
SC416S	Bag, Mount Hardware	



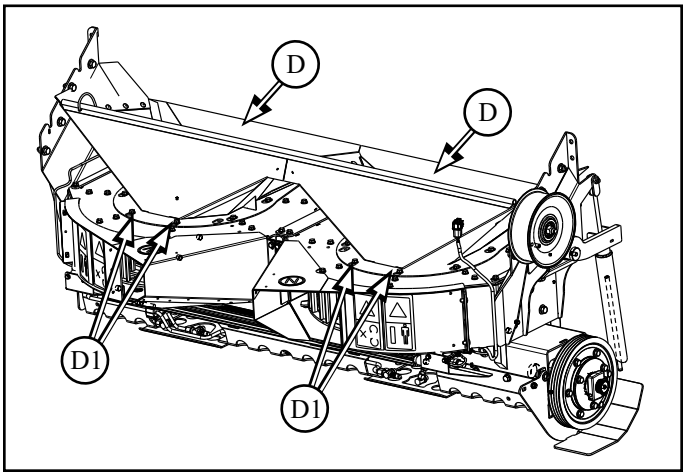
CAUTION

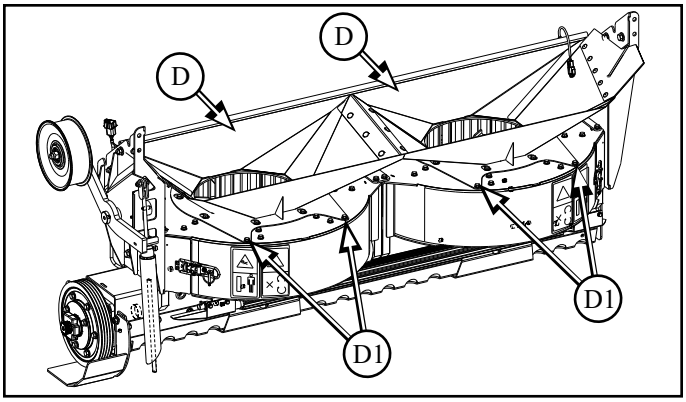
This component weighs 1300 lbs / 590 kg
Use a forklift with appropriate capacity

3.3.1 Keep Seed Control Unit (**B**) mounted to service frame (**C**) during installation

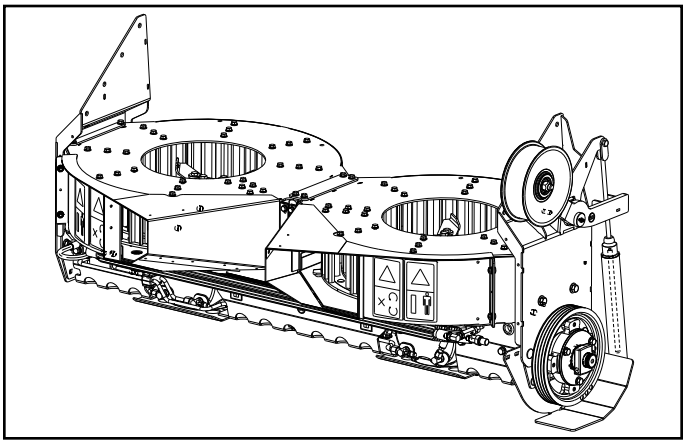


3.3.2 Remove hoppers (**D**) from top of Seed Control Unit
- remove front bolts x2 (**D1**) per hopper
- loosen rear bolts x2 (**D1**) per hopper

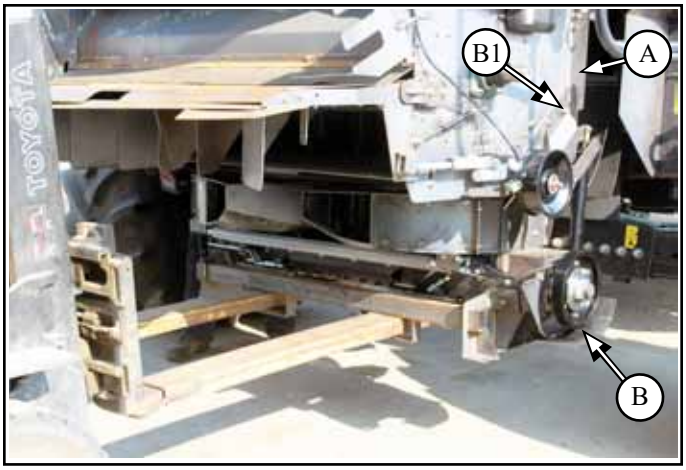




Hoppers removed

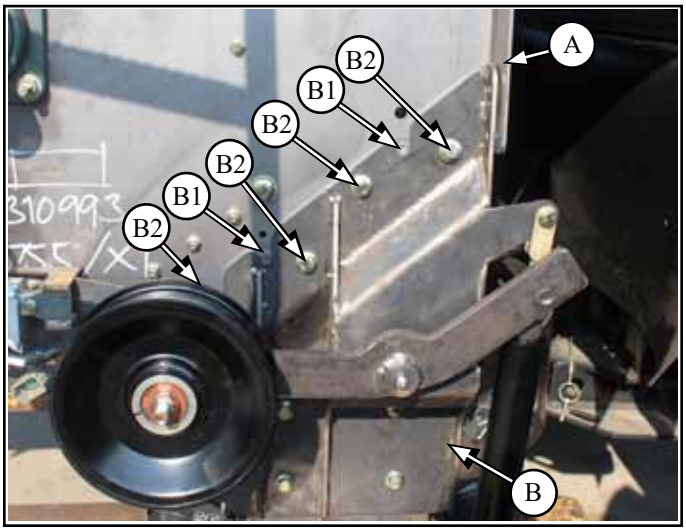


3.3.3 Slide chopper up into service position for ease of SCU installation

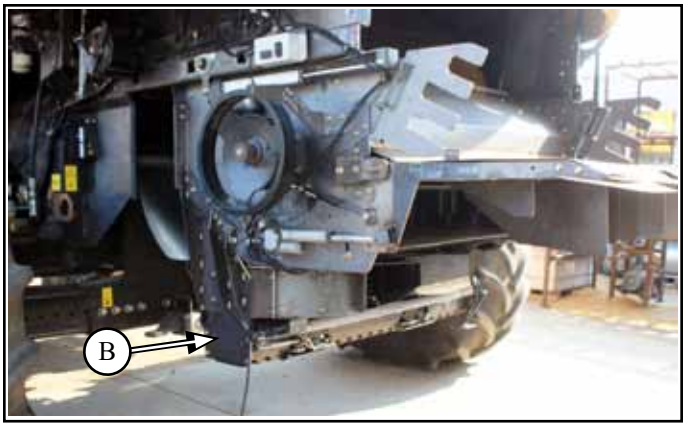


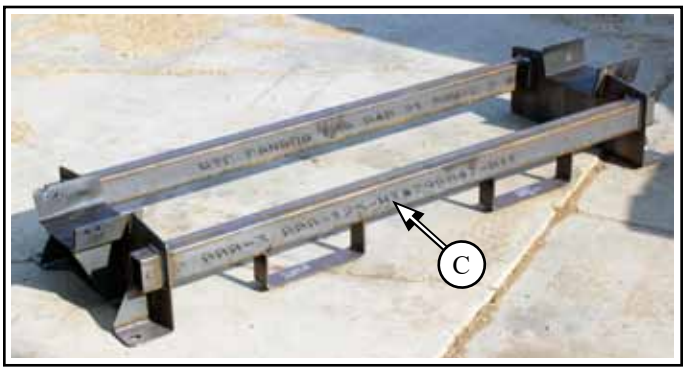
3.3.4 Lift Seed Control Unit (**B**) up and align with the mounting pins (**B1**) on side of chopper (**A**)

3.3.4.1 Attach to chopper with:
- M12 x 25 flange bolt and flange nut (**B2**) x4
- both sides

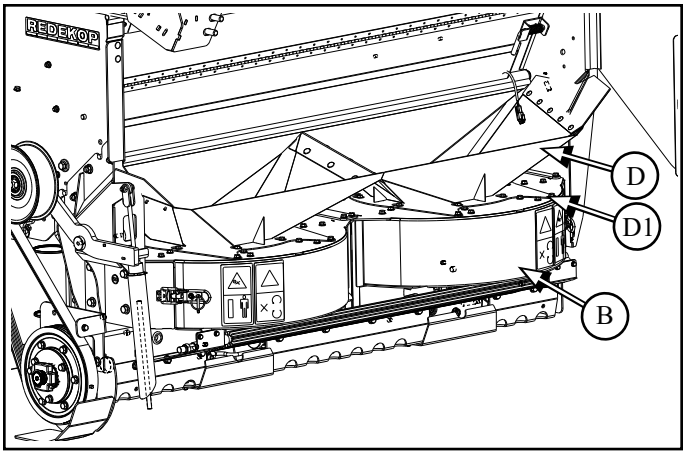


3.3.5 Remove service frame (**C**) from Seed Control Unit





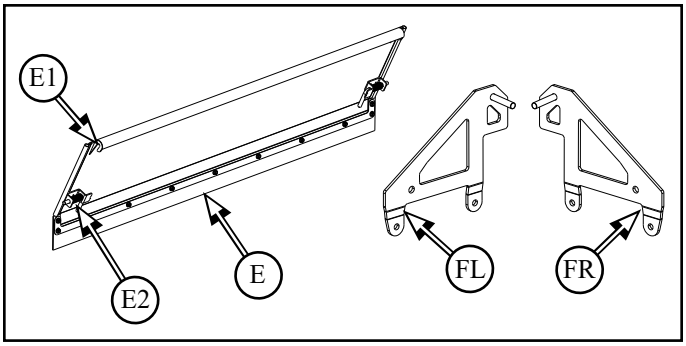
3.3.6 Reinstall hoppers (**D**) onto top of Seed Control Unit - reuse hardware (**D1**)



3.4 Chaff Deflector Hood Installation

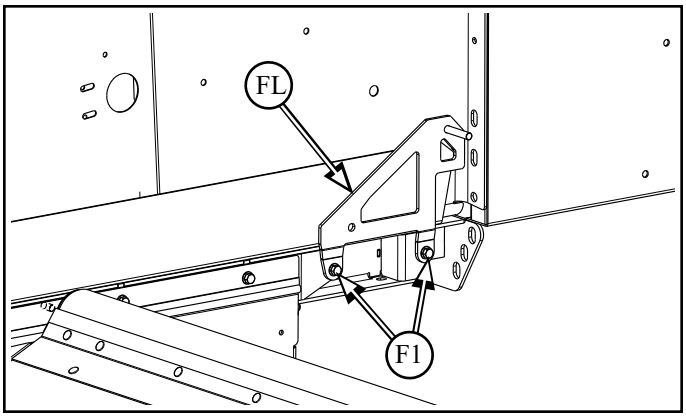
Parts List:

CH773BA	SCU Chaff Door Assembly (**E**)	Qty 1
CH774BL	Bracket Divider Mt Lt (**FL**)	Qty 1
CH774BR	Bracket Divider Mt Rt (**FR**)	Qty 1
CH774S	Bag, Mount Hardware	

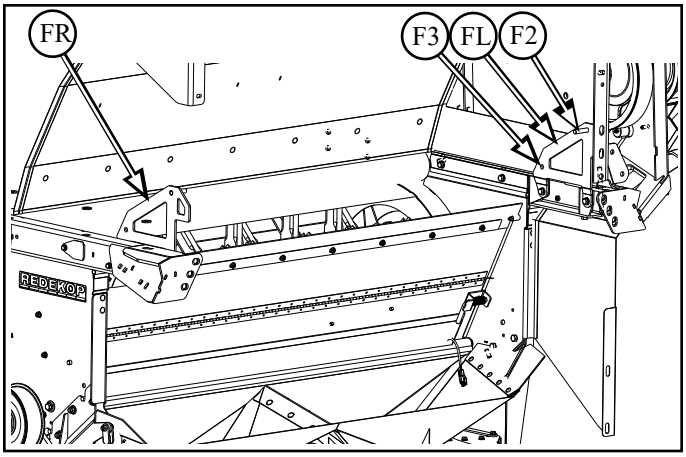


3.4.1 Install left divider mount bracket (**FL**) onto inside left frame, with:
- M10 x 25 flange head bolt (**F1**) x2

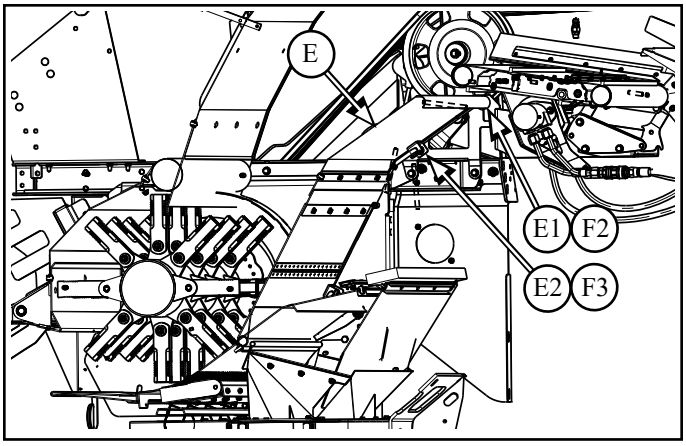
3.4.1.1 Repeat for right side



3.4.1 Slide slotted tabs (**E1**) on chaff door assembly (**E**) onto front skin support pins (**F2**)



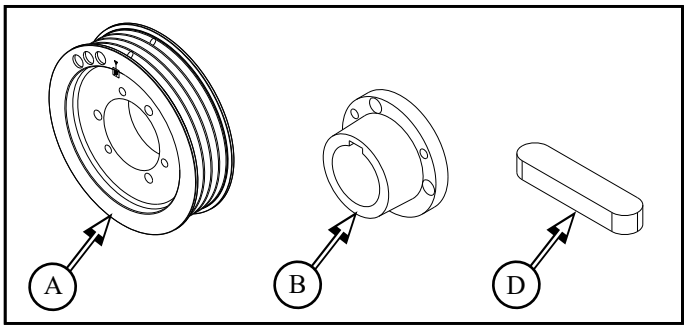
3.4.2 Engage chaff door pins (**E2**) into holes (**F3**) in front skin supports



3.5 Drive Sheave Installation

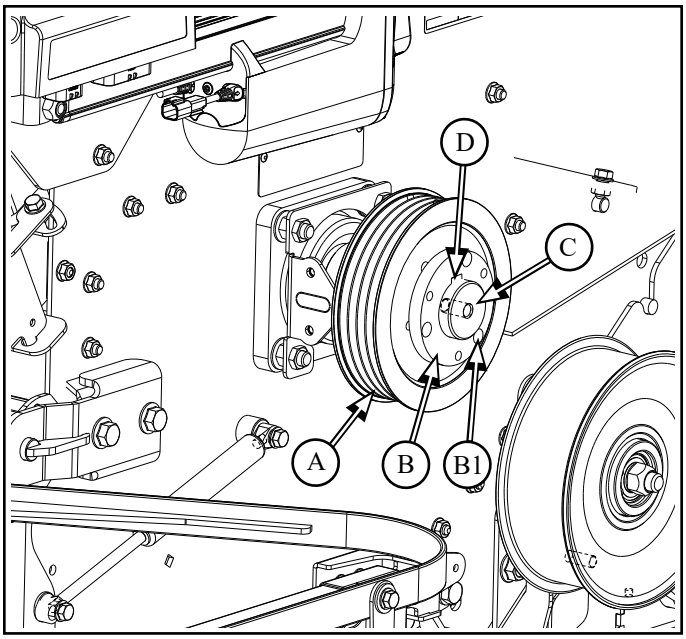
Parts List:

RP1149	Sheave 4 PVM 7od (**A**)	Qty 1
RP291	Bushing Taper SK 50mm (**B**)	Qty 1
323624	Key 14 x 9 x 63mm (**D**)	Qty 1
SC591S	Bag, Mount Hardware	

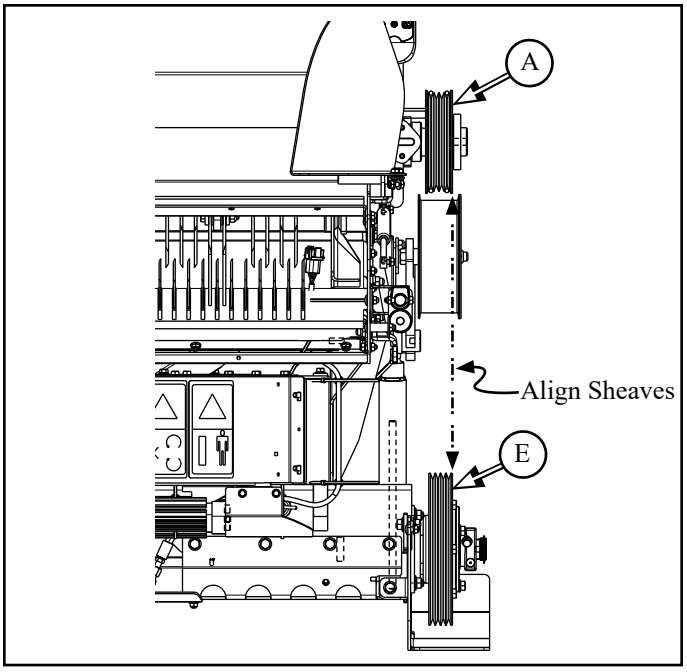


3.5.1 Install sheave (**A**) bushing (**B**) and key (**D**) onto chopper drive shaft (**C**), with:
- hardware with bushing (**B1**) x3

See **Appendix A** for bushing installation and removal procedure

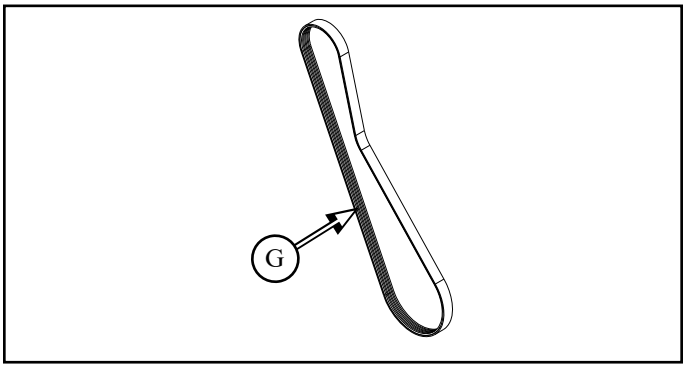


3.5.1.1 Ensure sheave (**A**) is aligned with sheave (**E**) on SCU
- use Laser aligning tool or straight edge



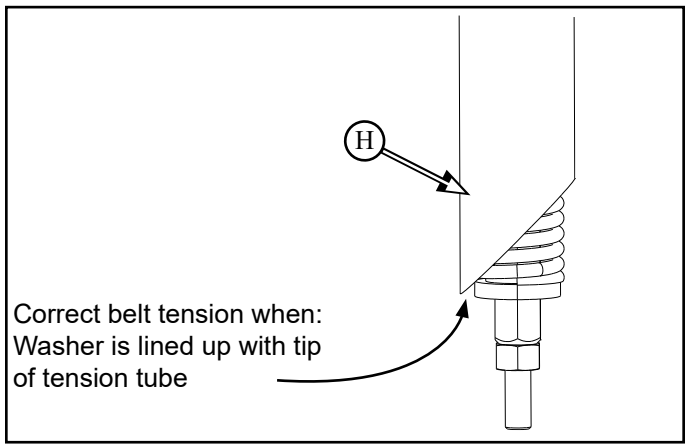
3.6 SCU Drive Belt Installation

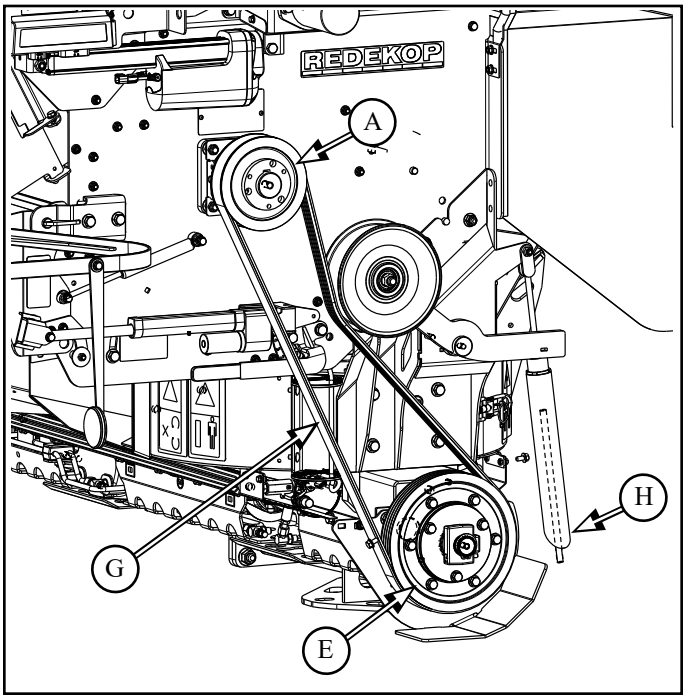
Parts List:
BE4M95K V Belt 4M 95L Kevlar (**G**) Qty 1



3.6.1 Install SCU drive belt (**G**) onto chopper and SCU sheaves (**A** & **E**)

3.6.1.1 Adjust belt tensioner (**H**) to indicated length
- washer lined up with tip of tensioner tube, see detail below

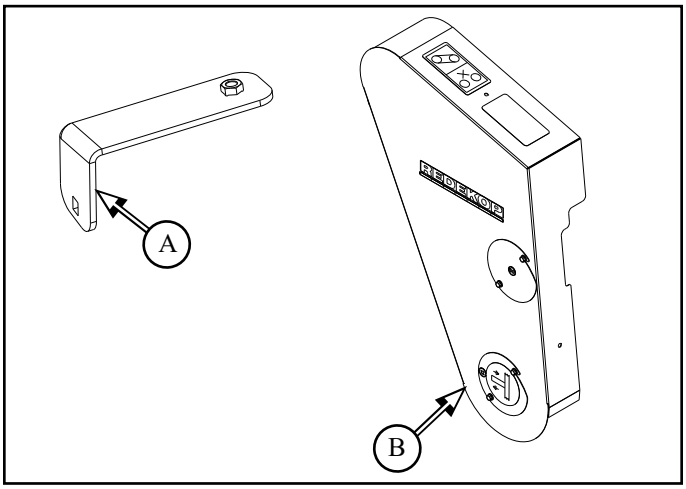




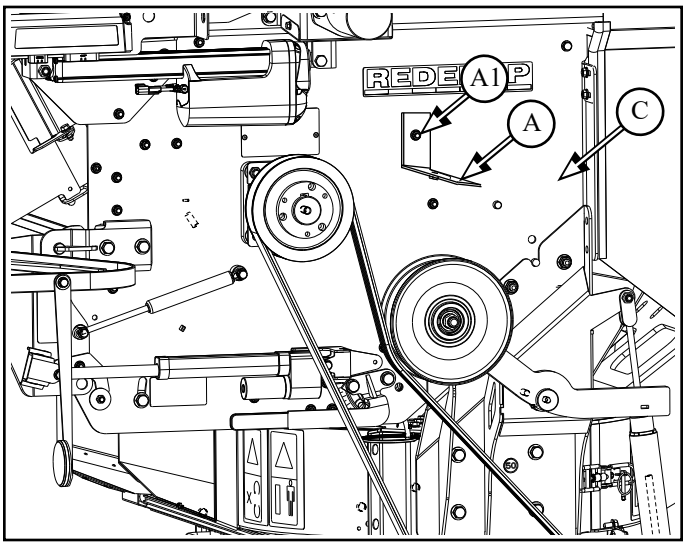
3.7 Shield Installation

Parts List:

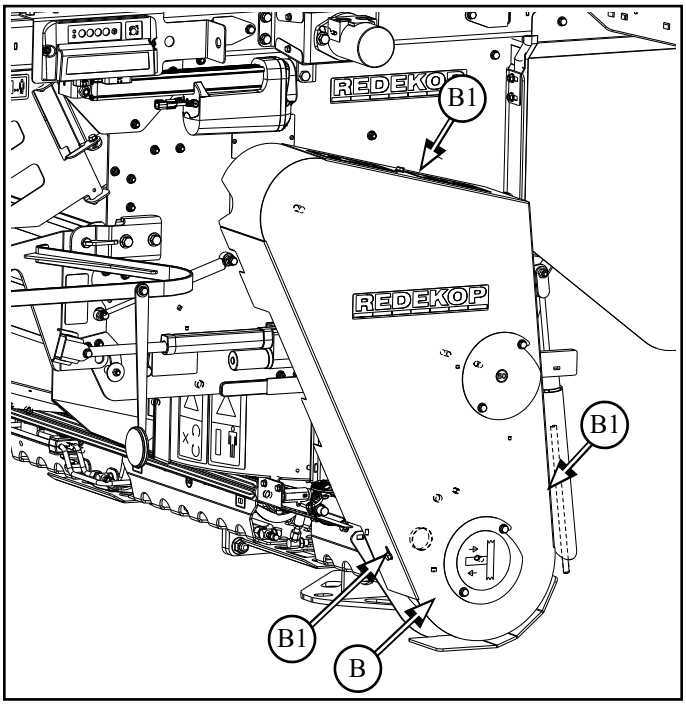
SC413BA	Shield Mount Bracket (**A**)	Qty 1
SC411BA	SCU Drive Shield CR (**B**)	Qty 1
SC591S	Bag, Mount Hardware	



3.7.2 Install SCU shield mount bracket (**A**) to chopper side wall (**C**), with:
- M8 x 20 round head bolt and flange nut (**A1**)
- ensure head of bolt is on inside of chopper wall



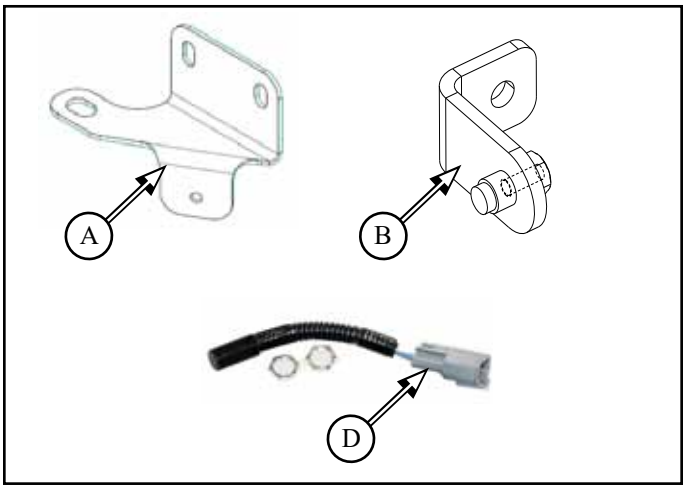
3.7.3 Install SCU drive shield (**B**) to mount brackets, with:
- M8 x 16 flange head bolt (**B1**) x3



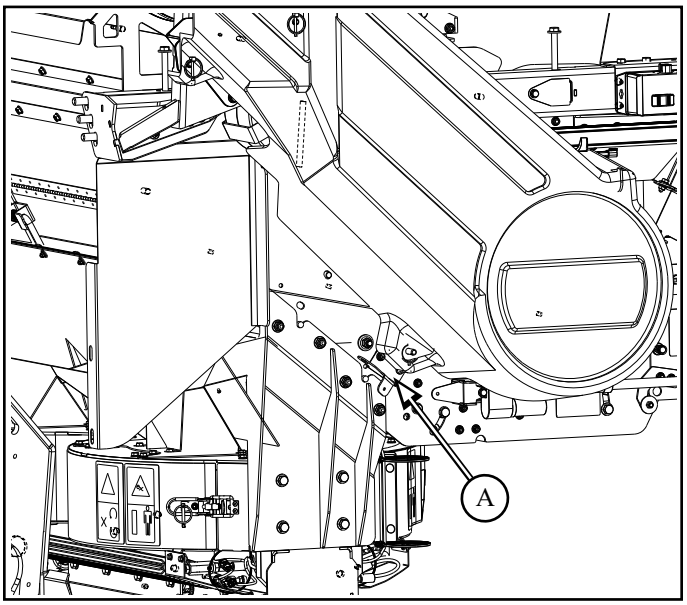
3.8 Chaff Door Proximity Sensor Installation

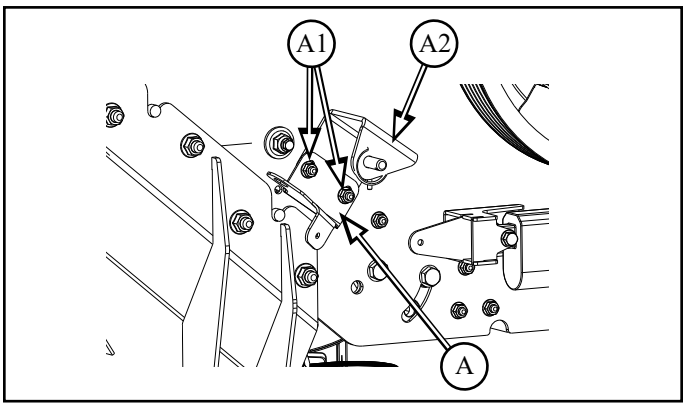
Parts List:

CH690B	Proximity Sensor Mount Bracket (**A**)	Qty 1
CH691BA	Proximity Sensor Target Assy (**B**)	Qty 1
RP1125	Proximity Sensor (**D**)	Qty 1
SC592S	Bag, Mount Hardware	
SC591S	Bag, Mount Hardware	

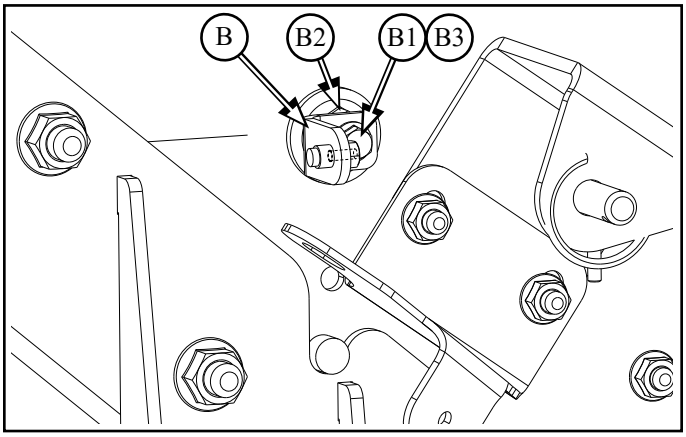


3.8.1 Install proximity sensor mount bracket (**A**) to shield mount bracket (**A2**) on side wall of chopper, with:
- M8 x 30 flange head bolt and flange nut (**A1**) x2



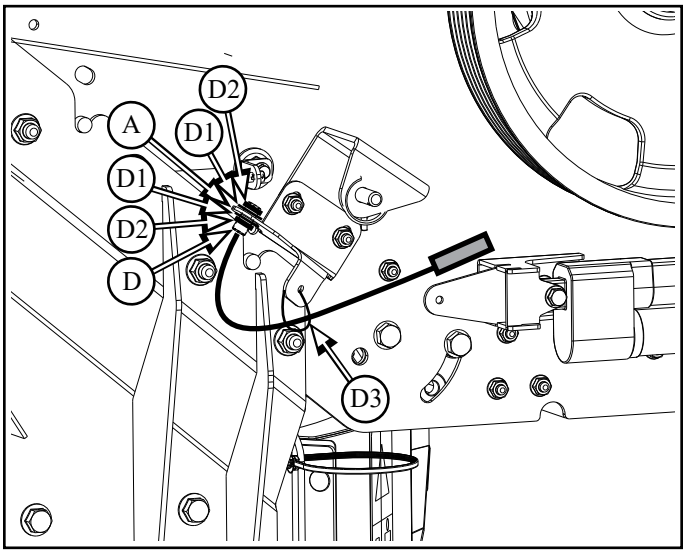


3.8.2 Install proximity sensor target assy (**B**) to threaded hole in chaff door pivot bolt (**B2**), with:
- M6 x 16 flange head bolt (**B1**)
  - remove from bolt head (**B2**) to install assy
- apply thread locker (**B3**) to secure bolt (**B1**) in place

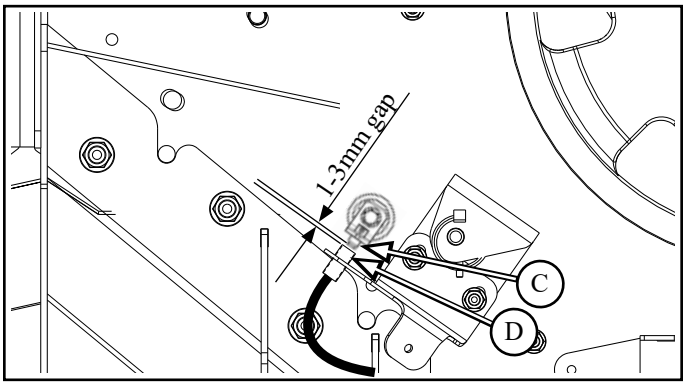


3.8.3 Install proximity sensor (**D**) to mount bracket (**A**), with:
- M12 flat washer (**D1**) x2, one both sides of plate
- Nut (**D2**) x2, one both sides of plate

3.8.3.1 Tie (**D3**) up sensor harness to tab on bracket (**A**)

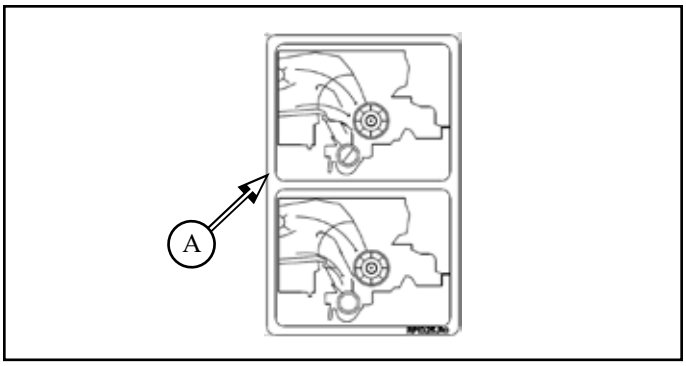


3.8.4 Ensure magnet (C) and proximity sensor (D) are aligned when the chaff door is in the by-pass position (down)

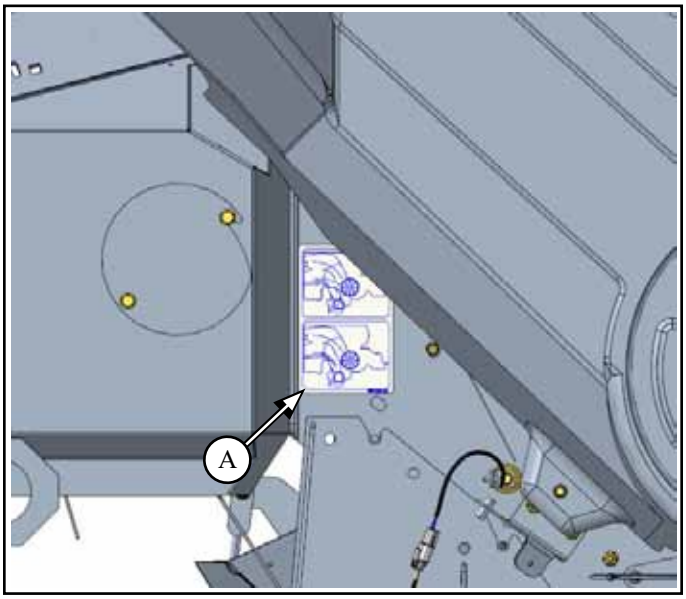


3.9 Door Position Decal Installation

Parts List:
RP1325 Door Position Decal (**A**) Qty 1



3.9.1 Apply door position decal (**A**) to left chopper wall as shown
- clean surface of chopper wall first



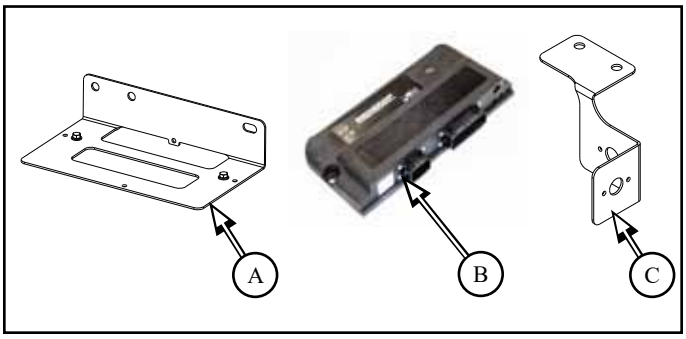
4 Electronics

4.1 ECU Installation

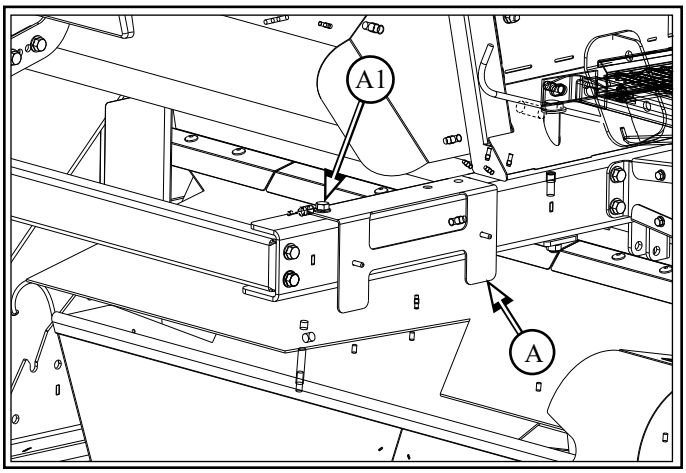
- may already be installed on combine with MAV chopper with actuated tailboards

Parts List:

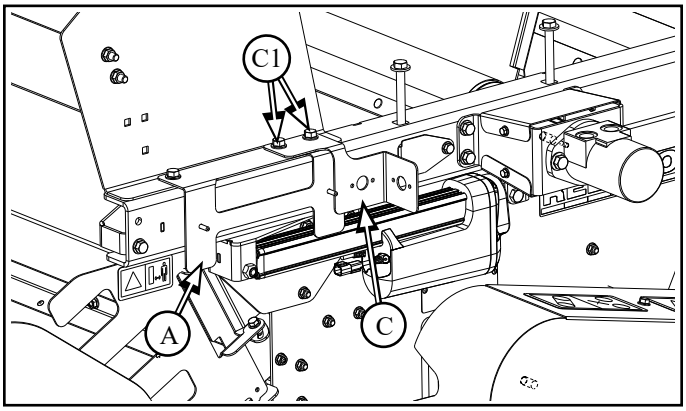
CS1167B	ECU Mount Bracket (**A**)	Qty1
RP1021	ECU (**B**)	Qty 1
CS1168B	Sensor Mount Plate CR (**C**)	Qty1



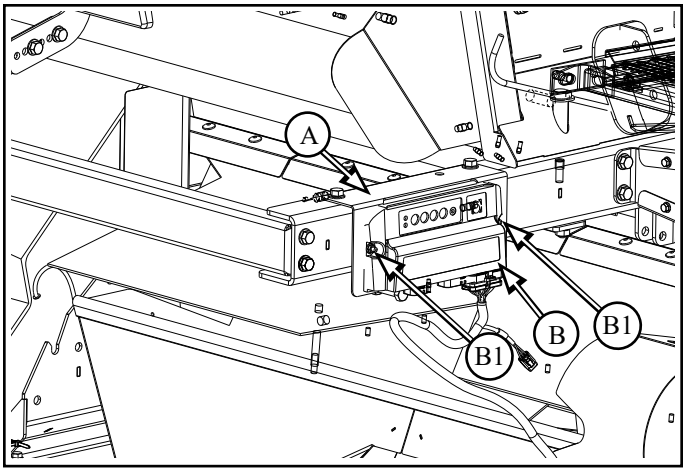
4.1.1 Install ECU mount bracket (**A**) onto chopper slide frame, with:
- M10 x 30 flange head bolt and flange nut (**A1**)



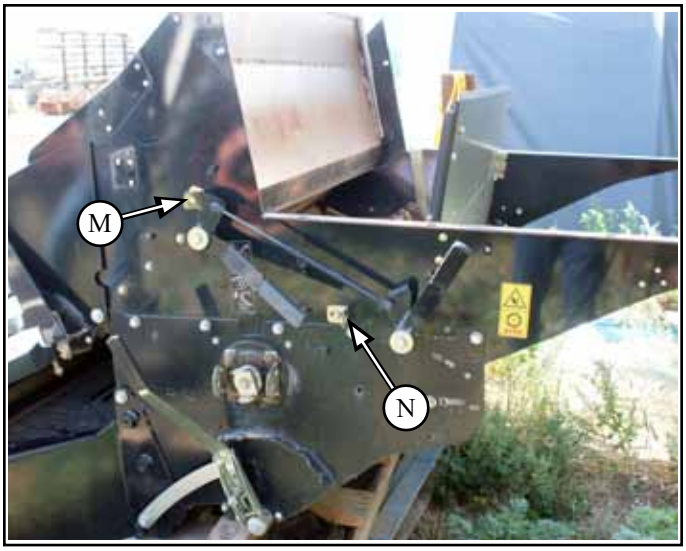
4.1.2 Install sensor mount plate (**B**) onto chopper slide frame, with:
- M10 x 30 flange head bolt and flange nut (**C1**) x2



4.1.3 Install ECU (**B**) onto mount plate (**A**), with:
- M6 flange nut (**B1**) x2



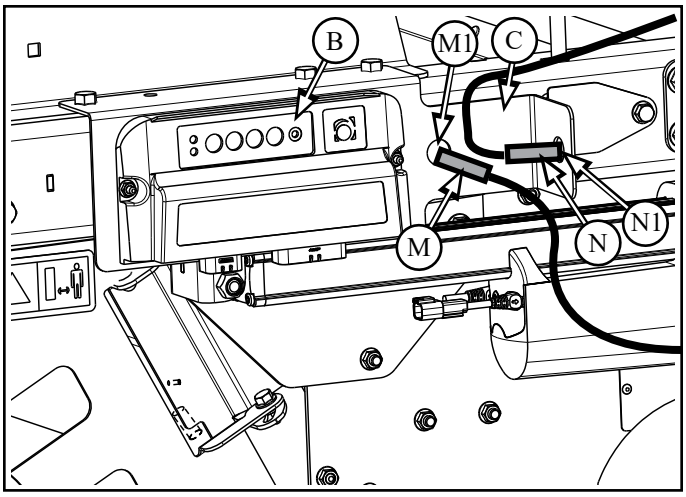
4.1.4 Remove switch plate and chopper door sensors (**M** & **N**) from OEM chopper



4.1.4.1 Reinstall OEM sensors (**M** & **N**) from the OEM chopper to sensor mount plate (**C**)

4.1.4.2 Install swath plate sensor (**M**) into hole (**M1**) on sensor mount plate (**C**), beside ECU (**B**)
- pointing to steel

4.1.4.3 Install chopper door sensor (**N**) into hole (**N1**) of sensor mount plate (**C**)
- pointing to “empty space”

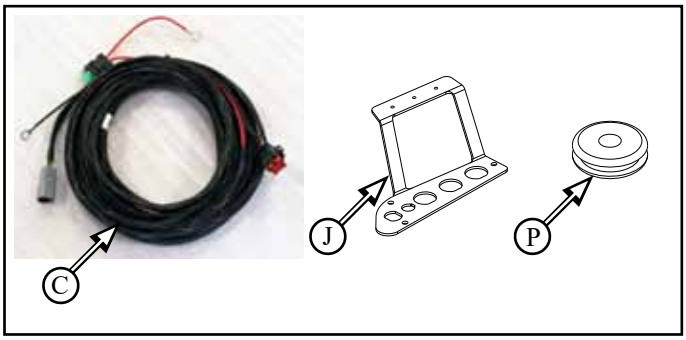


4.2 ECU Power/Cab Harness Installation

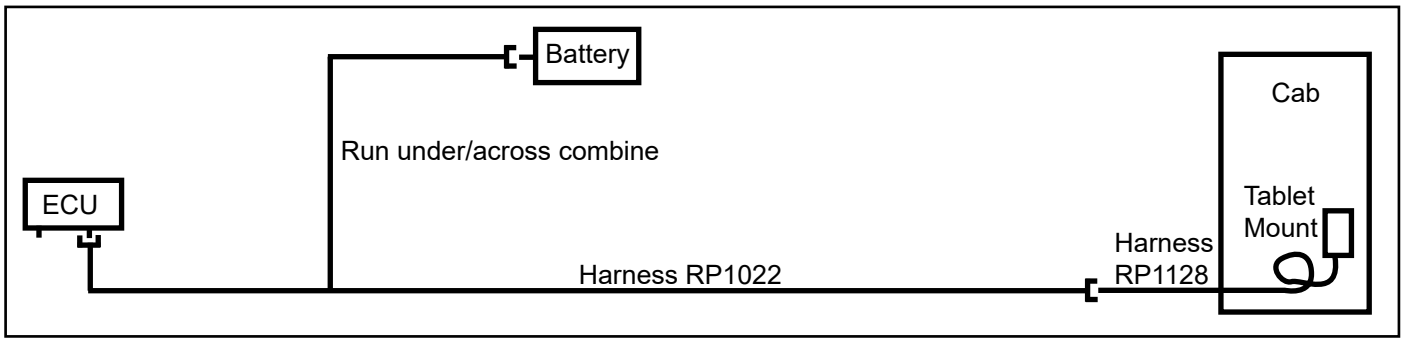
ECU Power/Cab Harness
- may already be installed on combine with MAV chopper with actuated tailboards

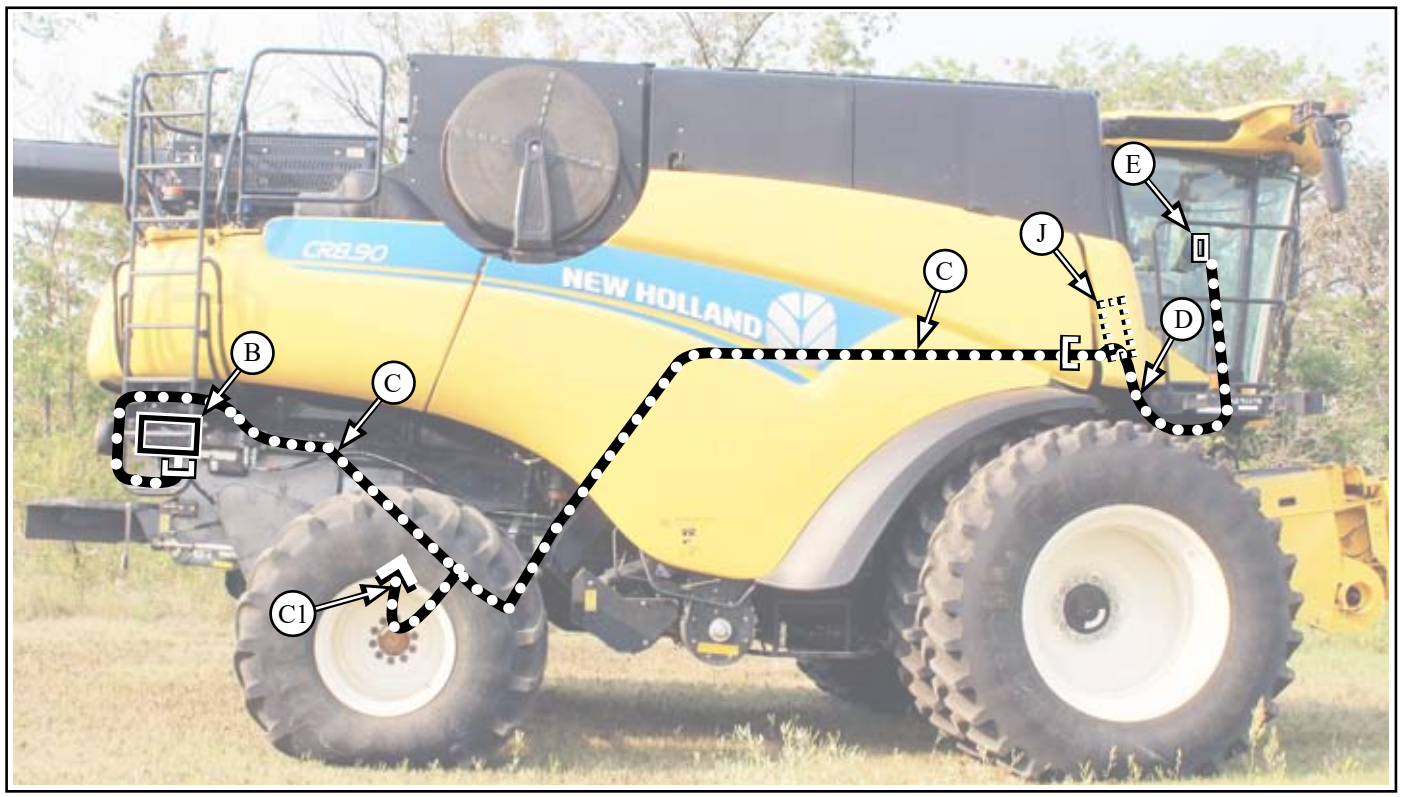
Parts List:

RP1022	Harness ECU Power/Cab (**C**)	Qty 1
CH762B	Bulkhead Plate (**J**)	Qty 1
RP1322	Grommet (**P**)	Qty 1



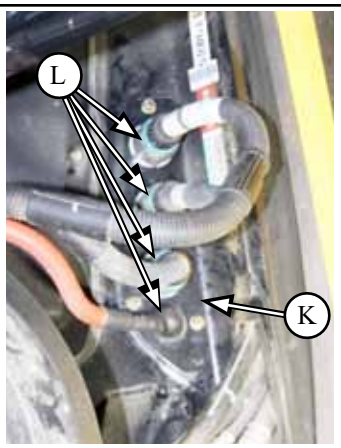
4.2.1 Install ECU Power/Cab Harness (**C**)
- connect harness (**C**) to ECU (**B**)
- route harness as shown along right side of combine from ECU (**B**) to up behind cab
- at Tee in harness, route “power lines” (**C1**) underneath the combine up to the battery on the left-hand side



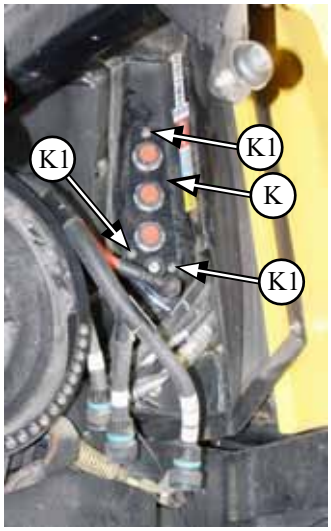


4.2.2 Ensure the battery disconnect switch is in the OFF position

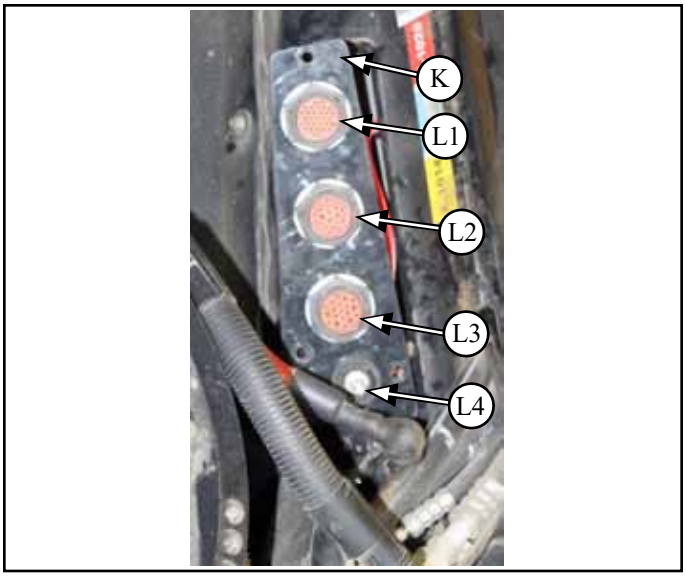
4.2.3 Disconnect all wire harness connectors (**L**) from existing connectors on bulkhead plate (**K**) behind cab



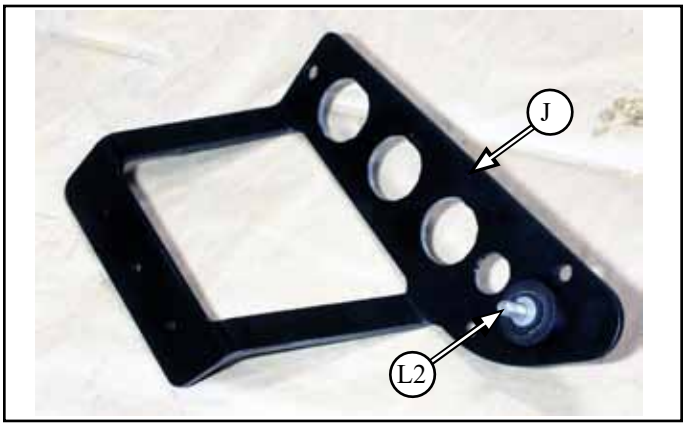
4.2.4 Remove nuts (**K1**) from existing bulkhead plate (**K**) behind cab



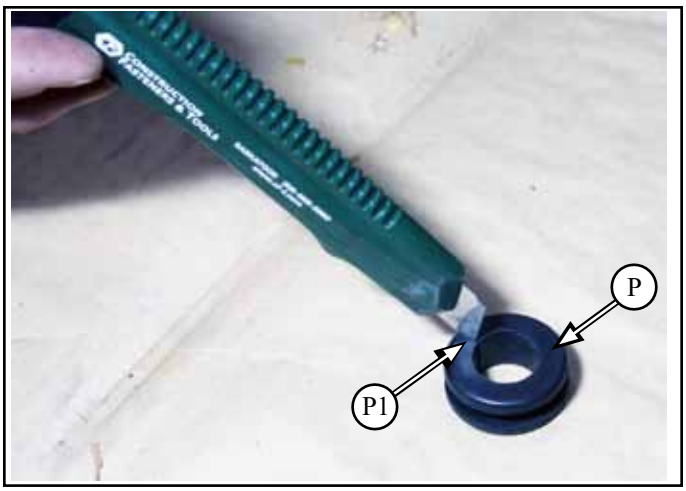
4.2.5 Remove connectors (**L1, L2, L3**) and stud (**L4**) from existing bulkhead plate (**K**)
- to be reinstalled in same order on new plate



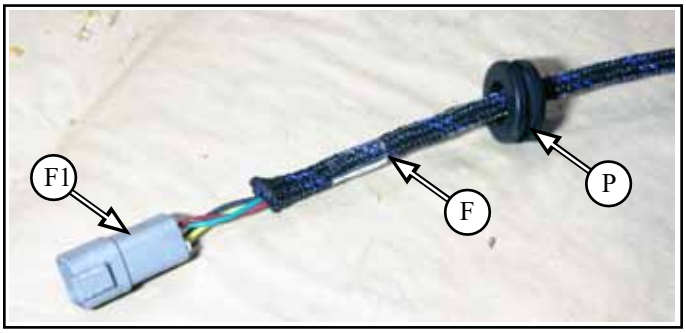
4.2.6 Install stud (**L2**) onto bottom hole in new bulkhead plate (**J**)



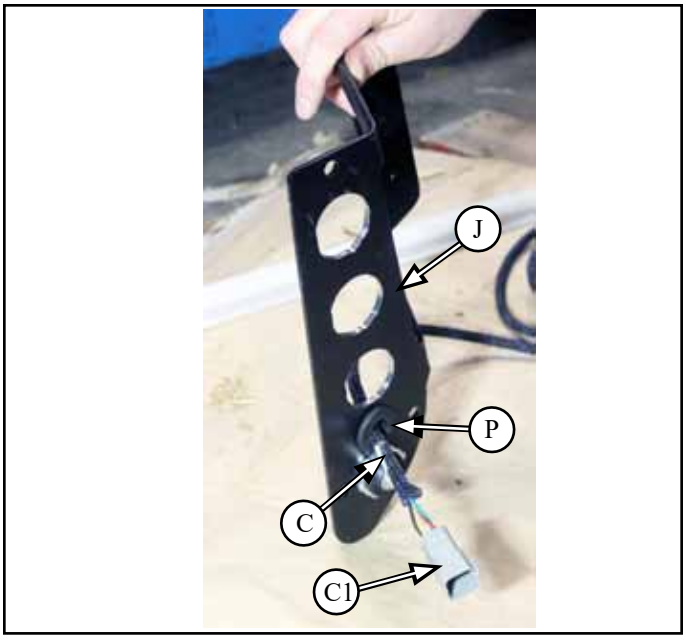
4.2.7 Slice (**P1**) thru 1 side of grommet (**P**)



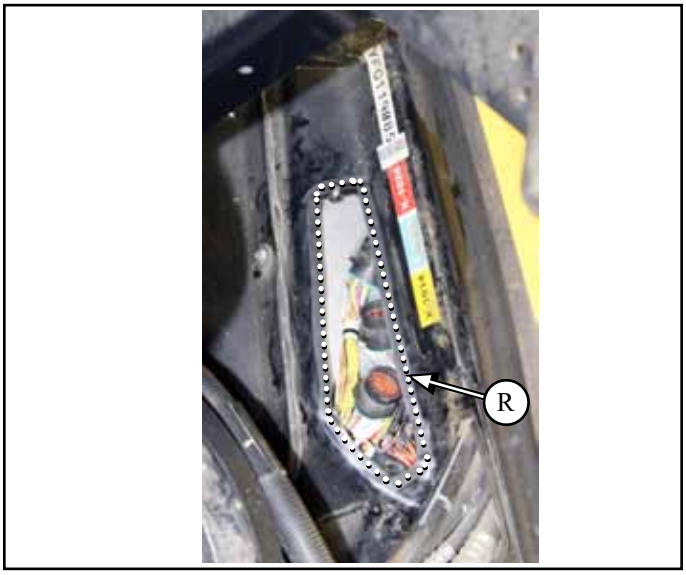
4.2.8 Slip grommet (**P**) onto new wire harness (**F**) from tablet inside cab
- ensure grommet (**P**) is closest to the female connector end (**F1**) of harness (**F**)



4.2.9 Install grommet (**P**) with harness (**C**) onto new bulkhead plate (**J**)
- ensure female connector end (**C1**) is fed thru the hole



4.2.10 Apply sealant tape (**R**) around bulkhead hole on combine
- ensure there are no gaps present



**** Do Not tighten zip ties securing Harness (C) until in-cab wiring is completed ****

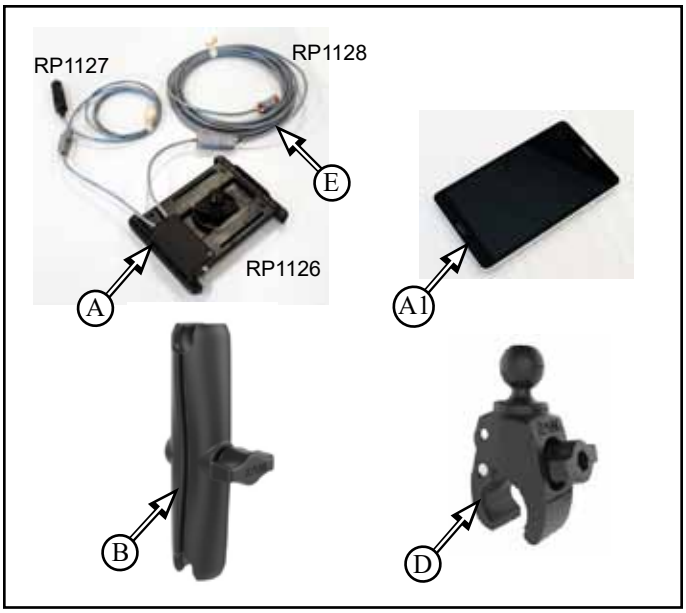
There are two (2) monitoring options, Tablet and ISOBUS.
ISOBUS displays on the OEM combine screen and the tablet is a stand-alone display.
Both options have been provided below.

4.3 Tablet

There are two (2) monitoring options, Tablet and ISOBUS. Isobus displays on the OEM combine screen and the tablet is a stand-alone display. Both options have been provided

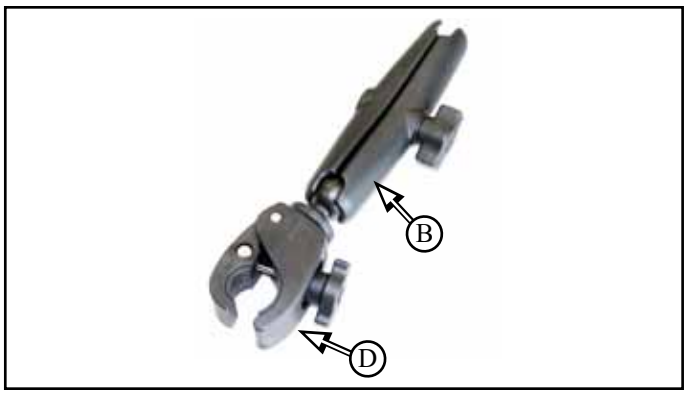
Parts List:

RP1126A	Tablet Mount, Harness Assy (**A**)	Qty 1
RP1065	Tablet 8 in (**A1**)	Qty 1
RP1229	RAM Mount Double Socket (**B**)	Qty 1
RP1234	RAM Mount Clamp w/ball (**C**)	Qty 1
RP1128	Harness CAN Extention 20ft (**E**)	Qty 1

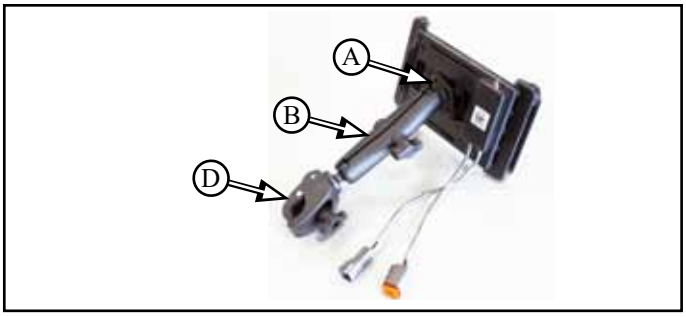


4.3.1 Route connector end (**C1**) of harness (**C**) downward and towards the front
- this will come out under the arm rest controls plastic cover

4.3.2 Assemble the double socket clamp (**B**) to clamp w/ ball (**D**)



4.3.3 Assemble the double socket assembly (**B**) to the ball on the tablet mount (**A**)



Prior to installation in combine - check for a software update for Redekop Controller application. See operator's manual section 4.4

4.3.4 Mount tablet, cradle assembly onto inside of combine cab at desired location using and locking the clamp (**D**) into place. Adjust angle of tablet for best viewing and lock into place.

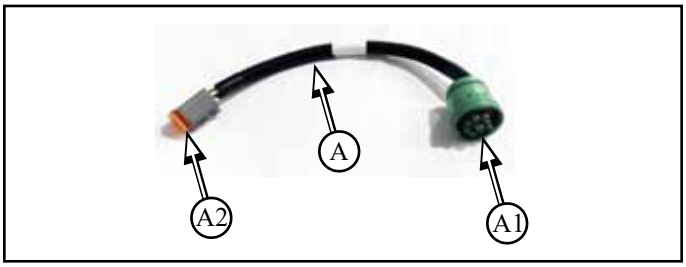
4.3.4.1 Connect harness (**C**) from ECU into tablet

See operator's manual for operation of tablet

4.3.5 Skip to section 7 for tablet software

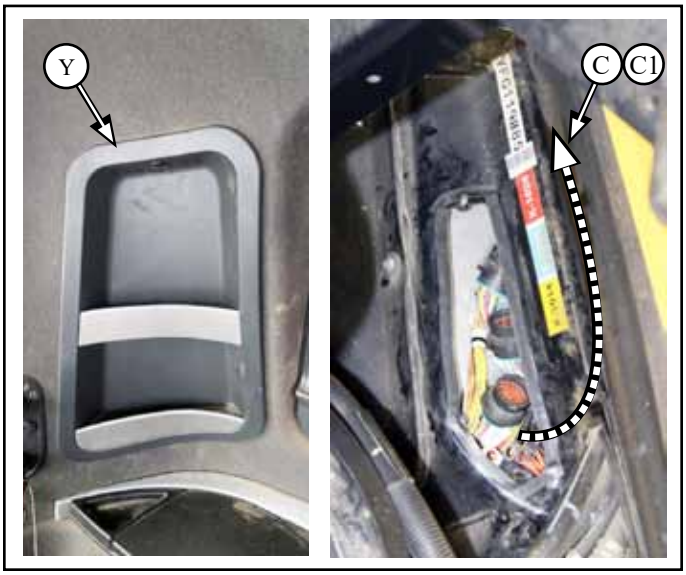
4.4 ISOBUS

Parts List:
RP1544 Isobus Diagnostic Adapter Harness (**A**) Qty 1



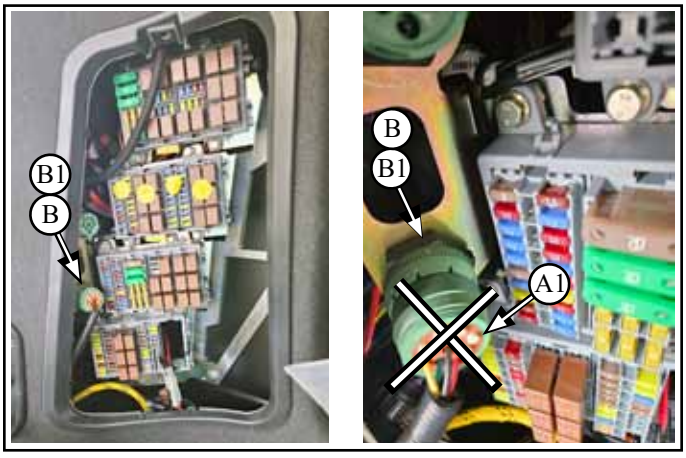
4.4.1 Remove inner beauty panel (**Y**) in rear right corner of the cab to get access to diagnostic port (2 twist clips) - to be reinstalled

4.4.2 Route connector end (**C1**) of harness (**C**) upward - this will come out in the bottom of the in cab fuse panel to the right of the seat



4.4.3 Loosen nut (**B1**) on bottom diagnostics port (**B**) - this will allow connector to push in further and provide clearance for fuse panel cover
- do not remove nut

4.4.3.1 Do Not plug connector (**A1**) into bottom diagnostics port (**B**) until the ISOBUS Virtual Terminal (VT) has been setup



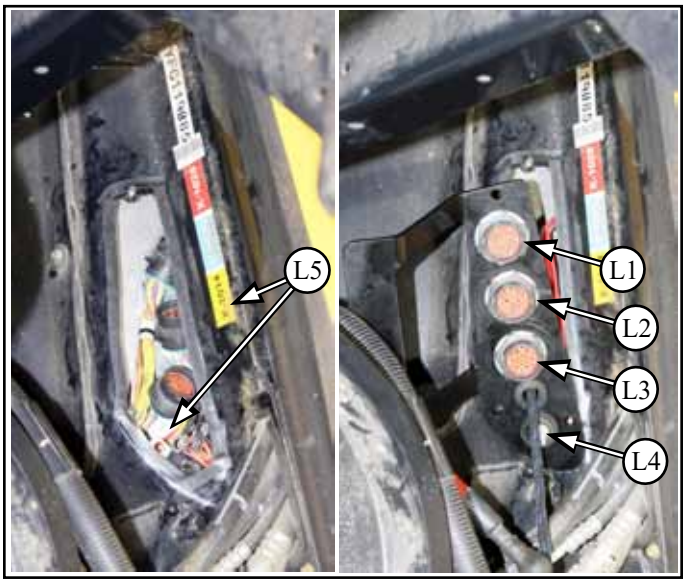
4.4.4 Connect connector (**A2**) of isobus diagnostic adapter harness (**A**) into ECU power cab harness (**C**) connector (**C1**)

4.5 Cab Bulkhead Completion

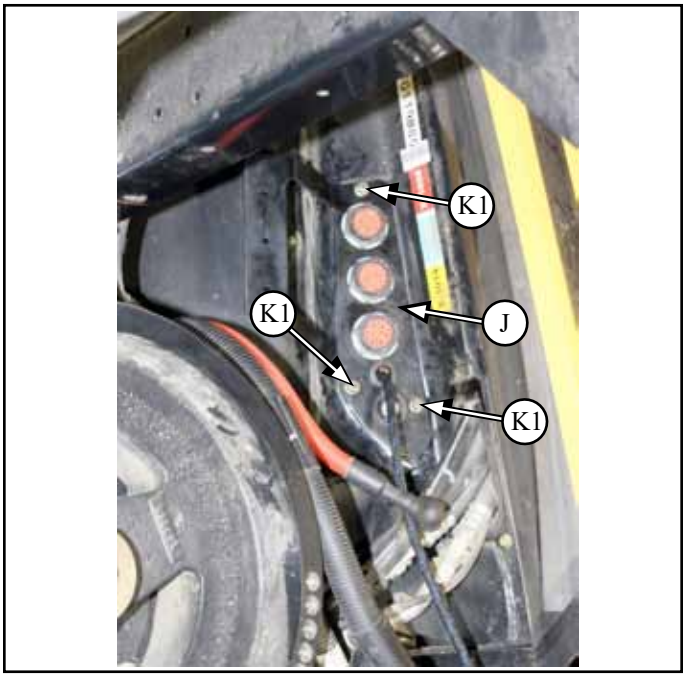
4.5.1 Install connectors (**L1, L2, L3**) and stud (**L4**) to back of new bulkhead plate (**J**) in same order as removed from old plate

- ensure number on connector labels (**L5**) matches number on the labels (**L5**) on combine wall and connectors are installed in same order

4.5.1.2 If old bulkhead bracket has label with harness numbers, mark number onto new bulkhead bracket



4.5.2 Install bulkhead plate (**J**) with connectors installed onto studs, secure in place with:
- reuse nuts (**K1**) x3



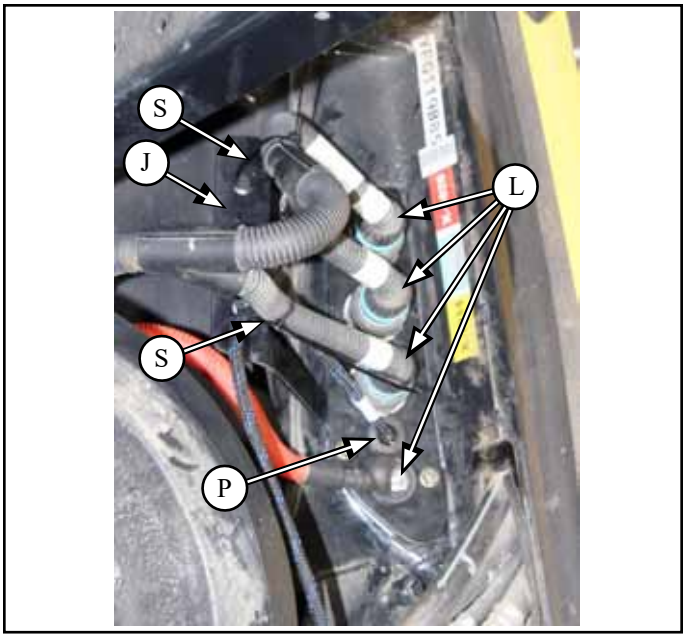
4.5.3 Reassemble harness connectors and power cable (**L**) to connectors (**L1-L4**) on bulkhead plate (**J**)

- ensure the connectors are in the same order as previous and number matches number on combine

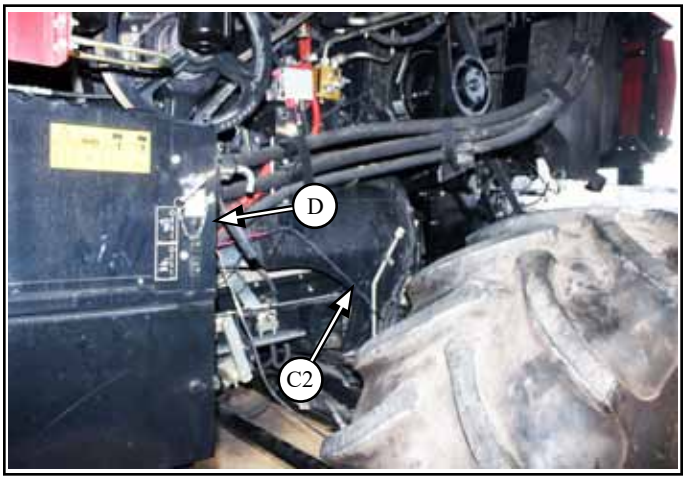
4.5.4 Secure harnesses in place with nylon ties (**S**) to bulkhead bracket (**J**)

4.5.5 Apply sealant to grommet (**P**)

**** Do Not tighten zip ties securing Harness (C) until in-cab wiring is completed ****



4.5.6 Connect “power lines” (**C2**) to battery (**D**) terminals



4.5.7 Tighten zip ties securing harness in place once routing is confirmed

For combines MY23 and newer:

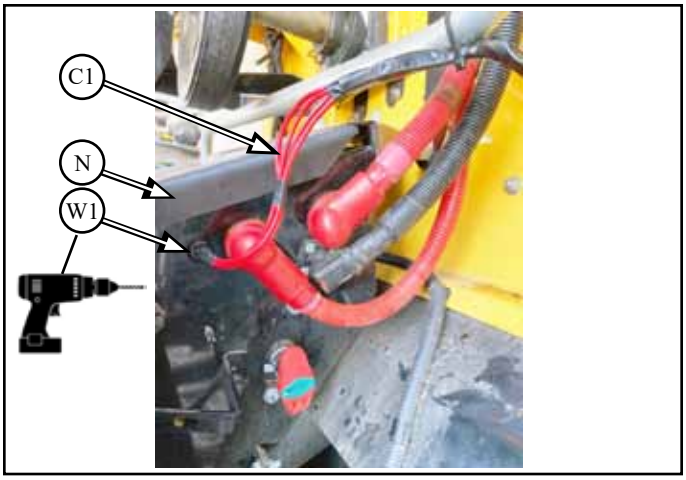
4.5.8 Drill 32mm (1.25in) hole (**W1**) in battery box (**N**) to allow power lines access

4.5.8.1 Slice grommet (**W**) thru 1 side

4.5.8.2 Thread power lines (**C1**) with fuse thru hole (**W1**)

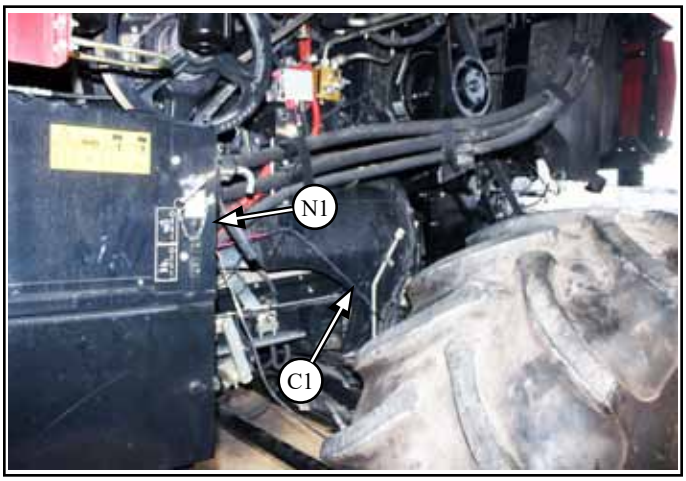
4.5.8.3 Install grommet (**W**) around power lines (**C1**) into hole (**W1**)

4.5.8.4 Connect power lines (**C1**) to battery terminals



For combines older then MY23:

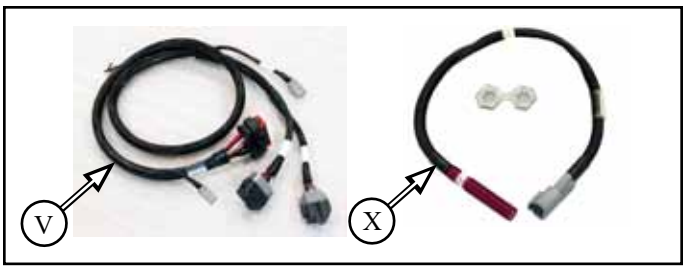
4.5.8.5 Connect “power lines” (**C1**) to battery terminals (**N1**)



4.6 Chopper/SCU Harness Installation

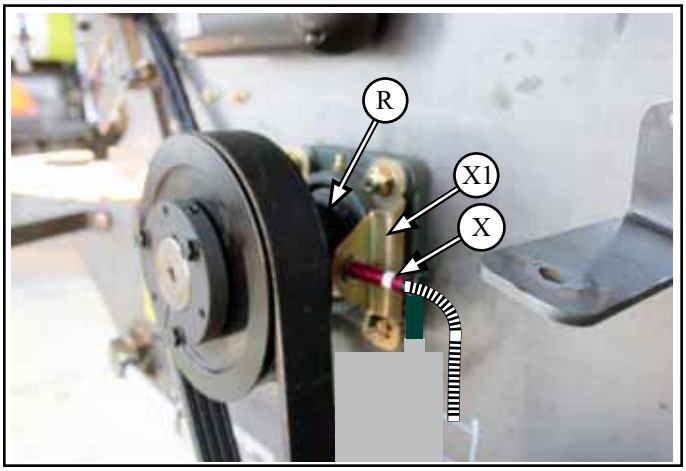
Parts List:

RP1123	Harness Chopper/SCU (**V**)	Qty 1
RP1124	Speed Sensor (**X**)	Qty 1

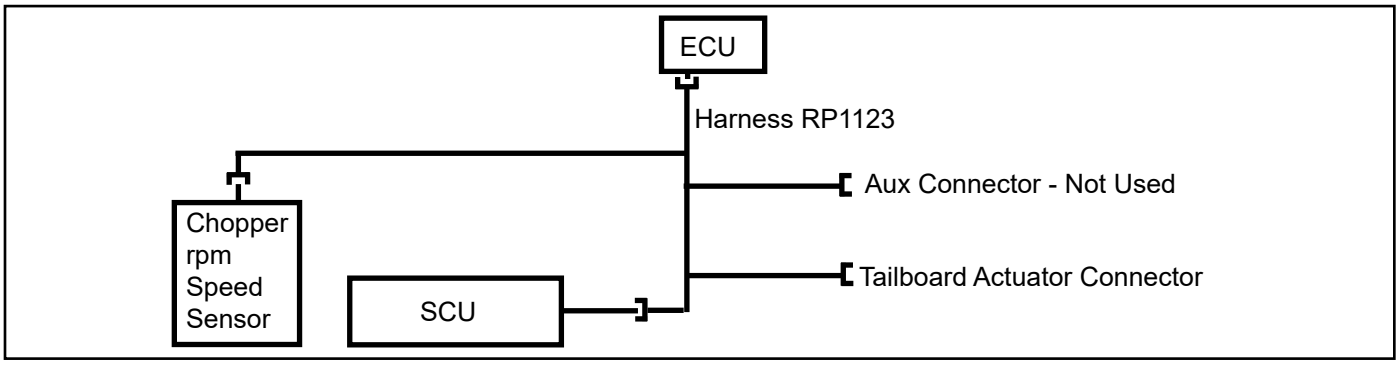


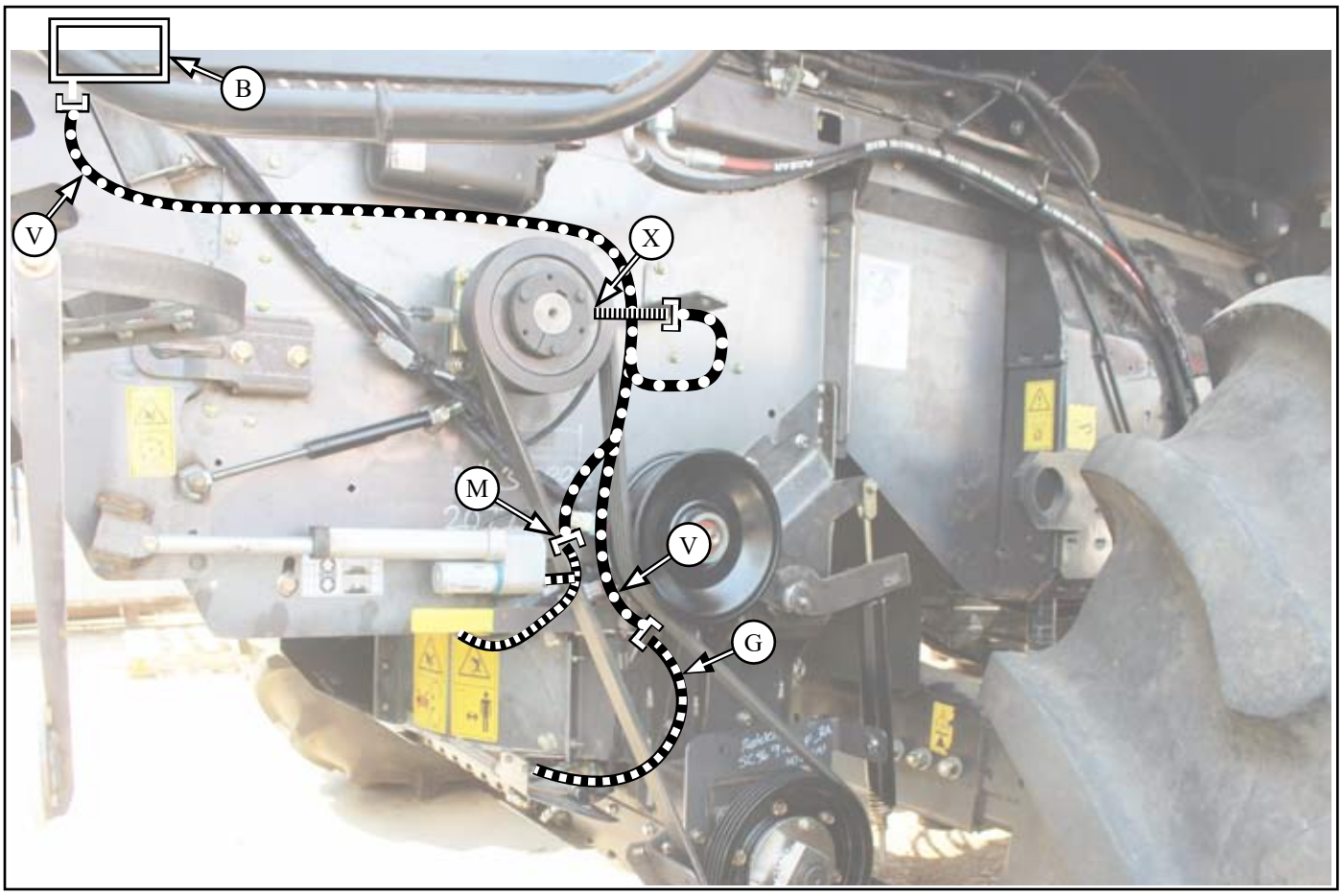
4.6.1 Install chopper speed sensor (**X**) into speed sensor mount bracket (**X1**) on right side of chopper, with:
- included hardware

4.6.2 Adjust sensor (**X**) to be 2-4mm from target (**R**)



4.6.3 Install Chopper/SCU Harness (**V**)
- connect harness (**V**) to ECU (**B**)
- route harness as shown along right side of chopper from ECU (**B**) to SCU harness (**G**)
- connect branch to chopper speed sensor (**X**)
- branch for auxialliary is not used
- connect branch for tailboard actuators (**M**)
- use cable tie straps to secure harness to existing harness or hydraulic lines running along side of chopper
- ensure harnesses are not in a pinch point location





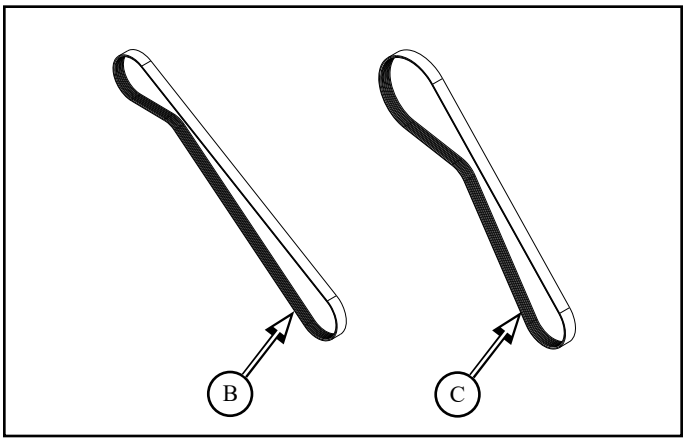
4.2.19.2 Move chopper/SCU back and forth to verify that there is enough slack in all harnessing and no pinched wires

5 Chopper Completion

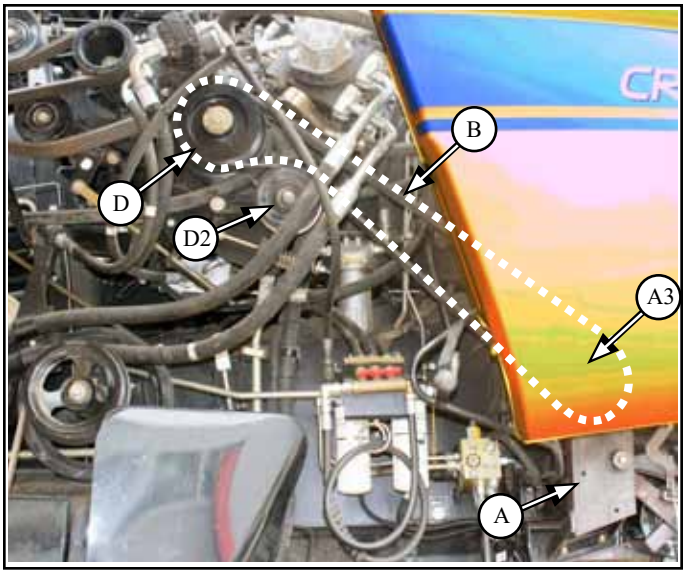
5.1 Chopper Drive Belt Installation

Parts List:
With SCU Installed

BE6M128K	VBelt 6M x 128L **(B)**	Qty 1
BE6M122K	VBelt 6M x 122L **(C)**	Qty 1



5.1.1 Install drive belt (**B**) onto the outter grooves of upper sheave (**D**), route around idler (**D2**) and install onto outter drive sheave (**A3**) on jackshaft (**A**)



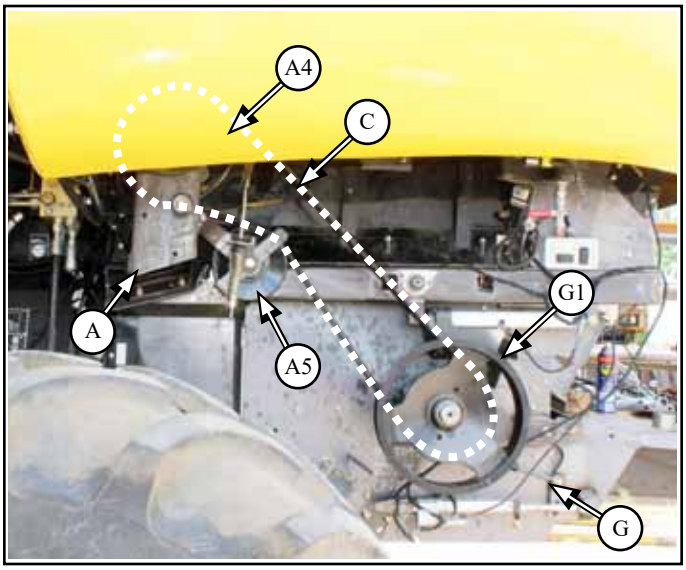
5.1.2 Install chopper drive belt **(C)** onto the inner sheave (**A4**) on jackshaft (**A**)**,** route around idler (**A5**) and install onto the sheave (**G1**) on chopper (**G**)

Belt (**C**) Routing for:
- Chopper High Speed:

Jackshaft	Chopper
- large sheave	- small sheave

- Chopper Low Speed:

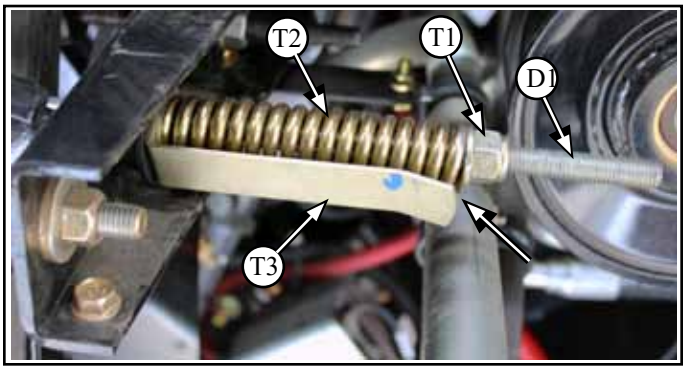
Jackshaft	Chopper
- small sheave	- large sheave



5.1.3 Adjust tension on belts:

5.1.4 To adjust the tension on the belt, the idler needs to be adjusted to apply the correct tension to the belt

5.1.5 To apply idler tension (**B1, C1, E1**), adjust nut (**T1**) on tension rod (**B2, C2, E2**) to tighten spring (**T2**) until it lines up with the spring indicator (**T3**)
- typical for all belts



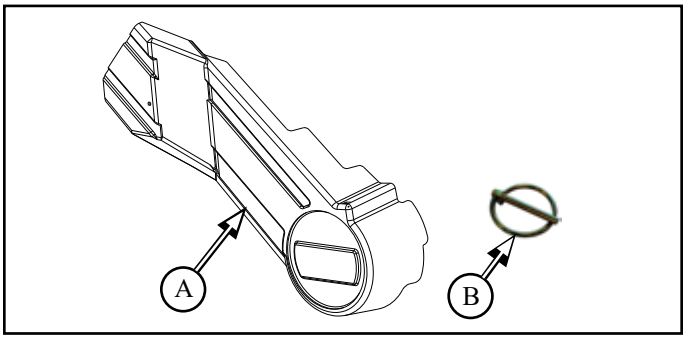
5.2 Chopper Drive Shield Installation

If the MAV Straw Chopper has previously been installed without an SCU, reuse the drive shield and pins

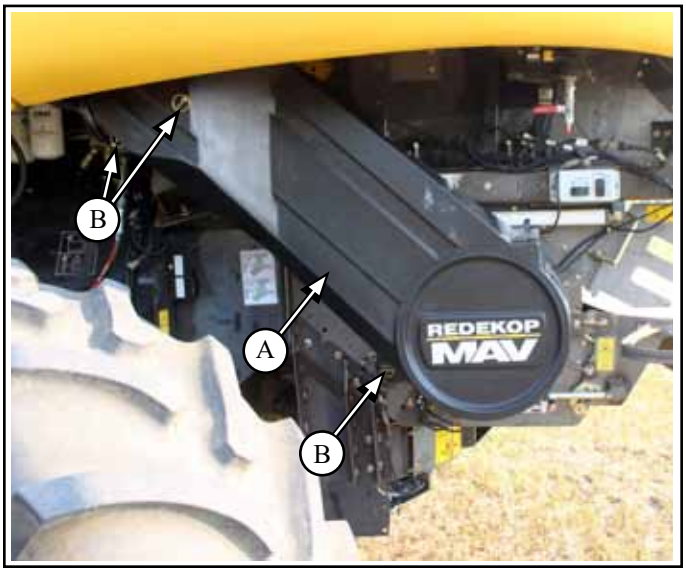
If this is a new MAV Straw Chopper installation with a SCU, the following drive shield and pins are included with the chopper packaging

Parts List:

RP1281 Drive Shield CR **(A)**	Qty 1
RP1105 Lynch Pin (**B**)	Qty 3



5.2.1 Install drive shield (**A**) over pins on mounting brackets
- secure in place with lynch pin (**B**) x3



6 ISOBUS Control Setup

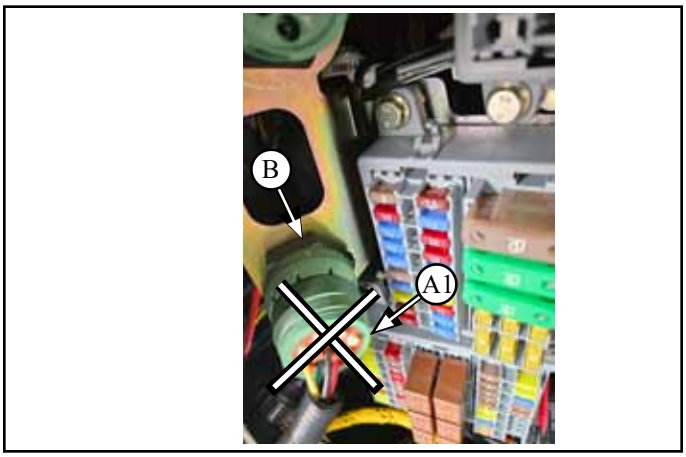
The Redekop Control System is designed to be displayed on ISO compatible virtual terminals

The Home Screen for each combine version and version of the monitor will look different, however, the Redekop SCU Monitor and Tailboard Control System will appear on a separate page of the monitor once set up as a run screen – scroll to the right or left (**B**) to find the Redekop Home screen once the run screen has been setup.

6.1 ISOBUS Display for CR Combine

Choose which screen you want the VT on if more than one display

6.1.1 Ensure plug connector (**A1**) is not connected into bottom diagnostics port (**B**)
- if this is plugged in and key is on, VT may try to load on display if VT settings have been turned on previously



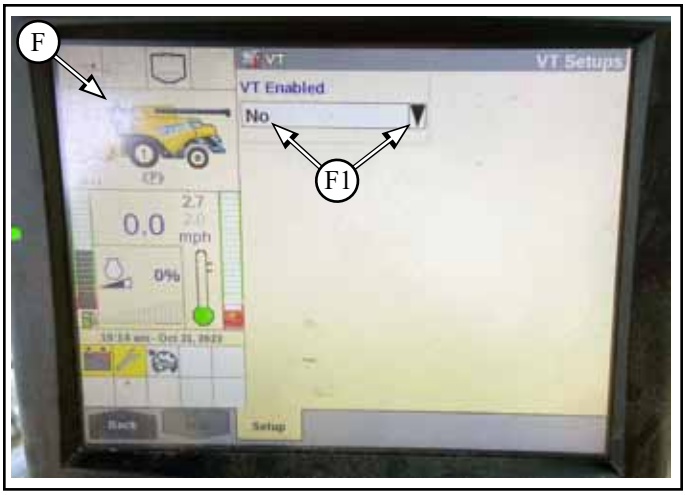
6.1.1.1 Turn key to Run position without starting combine

6.1.2 From runscreen (**C**) navigate to home screen (**D**):
- select <Back> button (**C1**)

6.1.3 From home screen (**D**) select <tool box> (**E**)

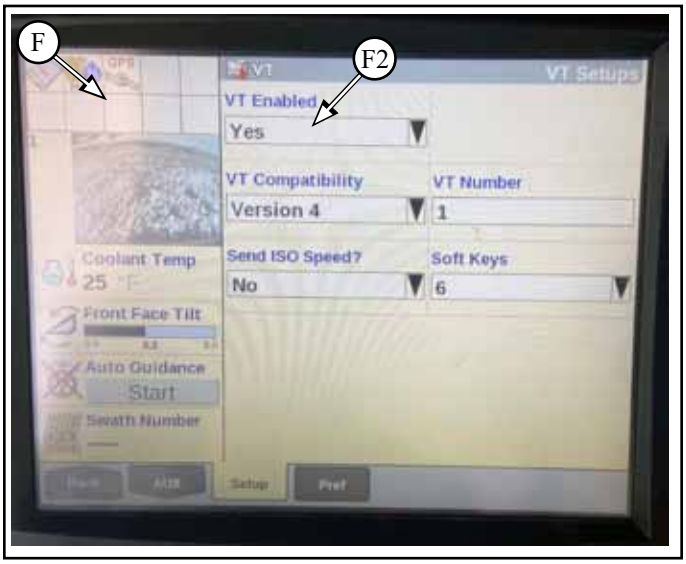
6.1.4 From tool box screen (**E**) navigate to <VT> (**F**) using <side arrows> (**E1**)

6.1.5 From VT Setups screen (**F**)
- VT Enabled displays No, select Yes in <dropdown> (**F1**)



6.1.6 From VT Setups screen (**F**)
- VT Enabled displays Yes (**F2**)

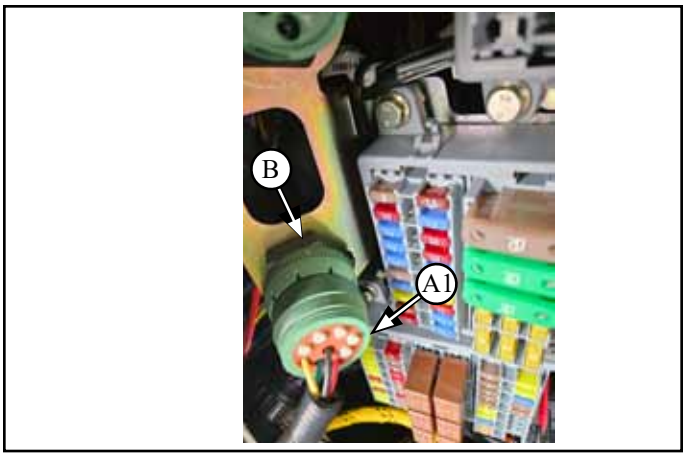
6.1.6.1 Set fields to match those shown in picture
- VT Compatibility: Version 4
  - Note: depending on machine, version 3 may only be available. This will work.
- VT Number: 1
- Send ISO Speed?: No
- Soft Keys: 6



6.1.7 Turn combine off, wait for display to fully shut down

6.1.8 Plug connector (**A1**) into bottom diagnostics port (**B**)

6.1.8.1 Turn key to Run position without starting combine



6.1.9 Navigate back to home screen (**D**) select <diagnostics> box (**G**)

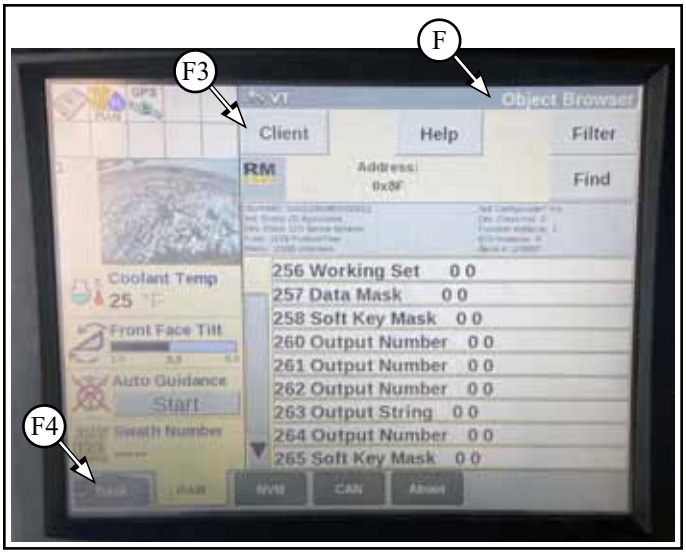
6.1.10 In diagnostic screen, navigate to VT setup

6.1.11 Once in VT screen (**F**), select <CAN> tab (**F3**)

6.1.11.1 Select <Client> box (**F4**) until you see address 0x8F
- should see packets loading
- the loading process may take a few minutes to complete

6.1.12 From VT Object Browser screen (**F**) - verify that 0x8F adddress (**F2**) is in system

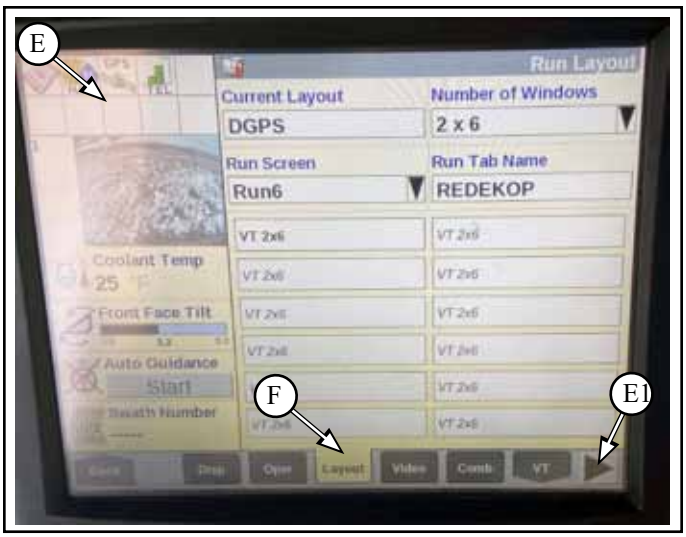
6.1.13 If it does not load, cycle combine power on / off, and try procedure again



6.1.13.1 Select <Back> button (**F4**) to get to Home screen (**D**)

6.1.14 From home screen (**D**) select <tool box> (**E**)

6.1.15 From tool box screen (**E**) navigate to <Layout> (**F**) using <side arrows> (**E1**)



6.1.16 Create Redekop Runscreen as per procedure in combine manual

6.1.16.1 Set up runscreen with 2x6 tile layout (**G**)

7 Redekop Software - ISOBUS & Tablet Install

7.1 Screen ICON Descriptions

The following monitor icons display throughout the pages:

(**A**) = Straw Chopper

(**B**) = SCU

(**C**) = Conveyor (Optional Equipment)

(**D**) = Settings Screen

(**E**) = Home / Parent Screen

(**F**) = ECU Information

(**G**) = Alarm History

(**H**) = Defaults Screen

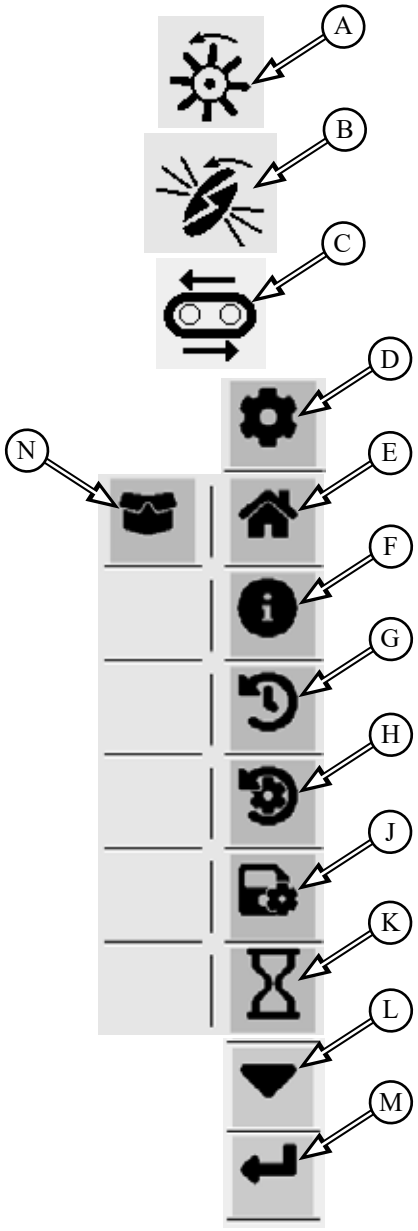
(**J**) = Save Settings

(**K**) = Time

(**L**) = Page Up or Down

(**M**) = Back one page

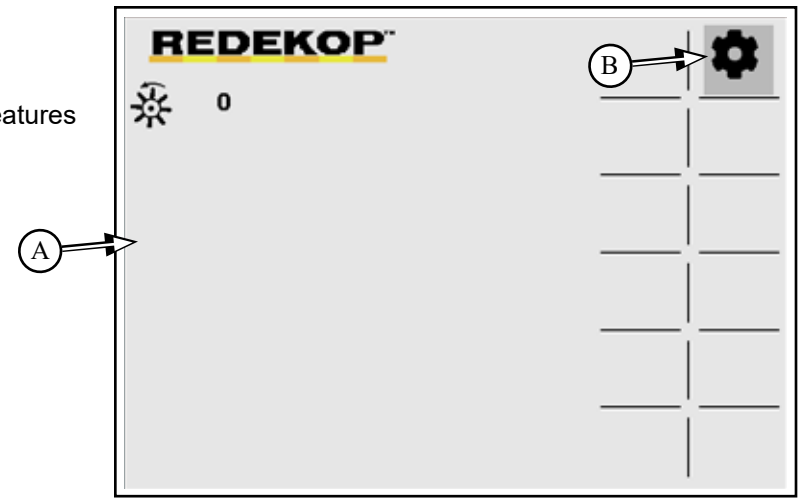
(**N**) = Installed Features Screen



7.2 Installed Features Screen

Redekop Home screen (**A**)

Select <Settings> button (**B**) to display Installed Features page (**C**)

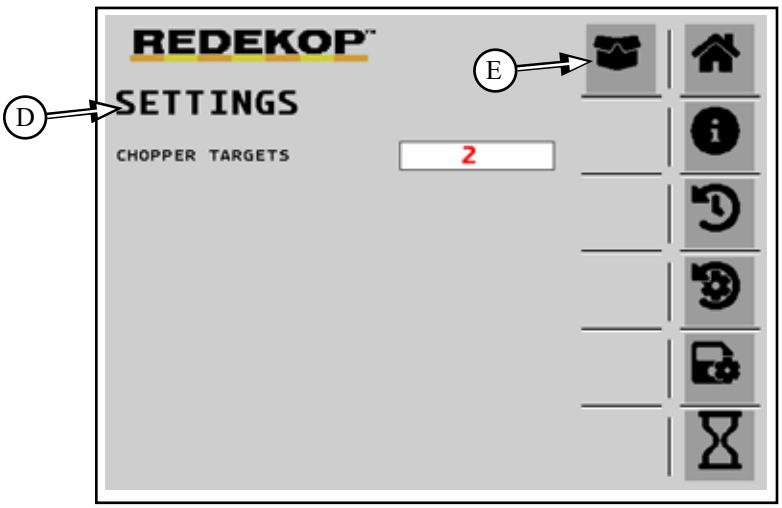


7.2.1 Installing SCU Feature

SCU feature needs to be installed with software code

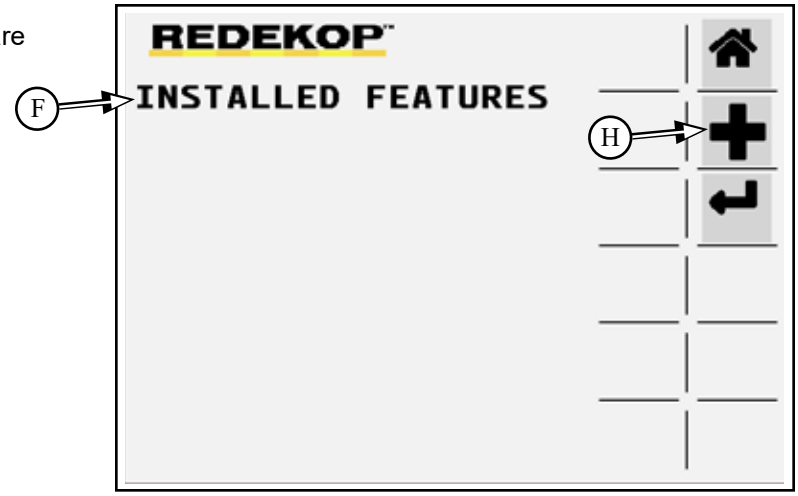
From the installed features screen, select <plus sign> button (**C**) to display Settings screen (**D**)

Select <Installed Features> button (**E**)

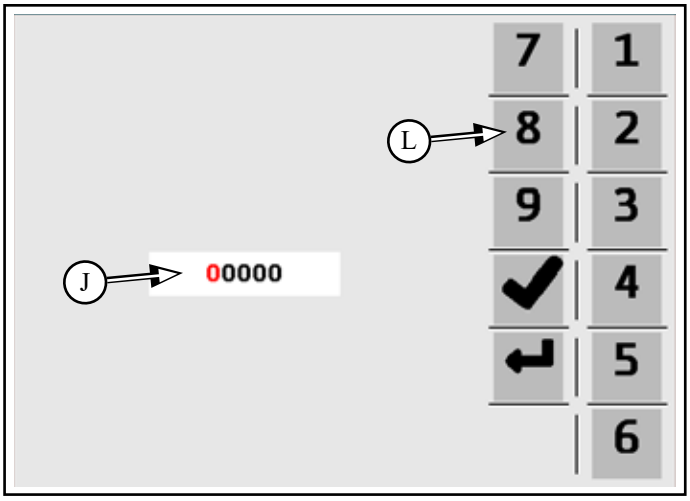


Installed Features screen (**F**) displays list of software features that are installed

Select <Plus Sign> (**H**)



Screen defaults to code input screen displaying 00000 (**J**)



7.3 Software Codes

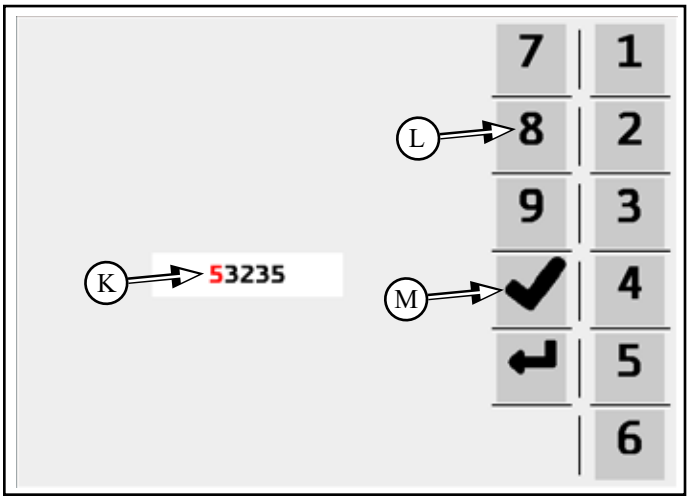
To enter new code (**K**), select <numbers> (**L**) on sidebar, code (**K**) will dispay in center of screen.
To correct a mistyped number, start over. The cursor returns to the first digit after the last digit is entered.

SCU Code: 53235

Tailboard Actuator Code: 22114 (if installed)

Conveyor Code: 47987 (if installed)

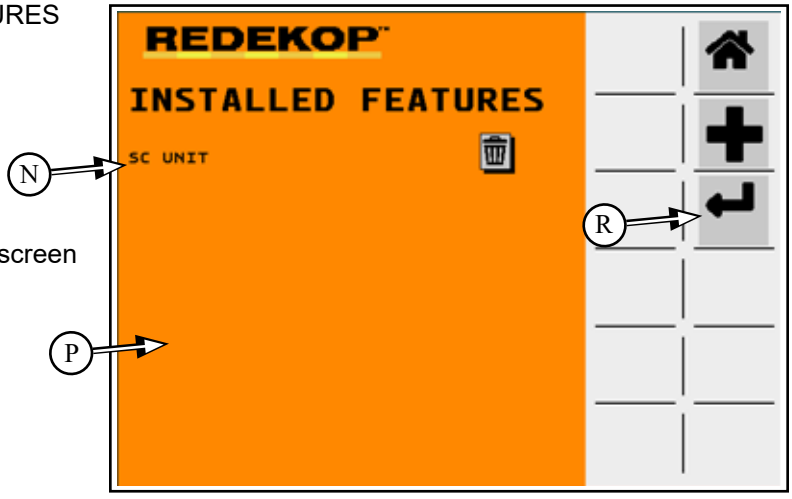
Select <Checkmark> (**M**) to confirm code



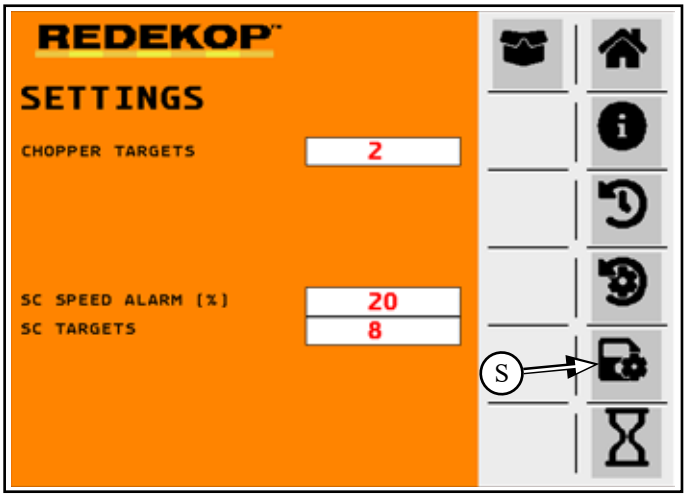
SC Option (**N**) now displays on INSTALLED FEATURES page

Orange color (**P**) display signifies unsaved feature

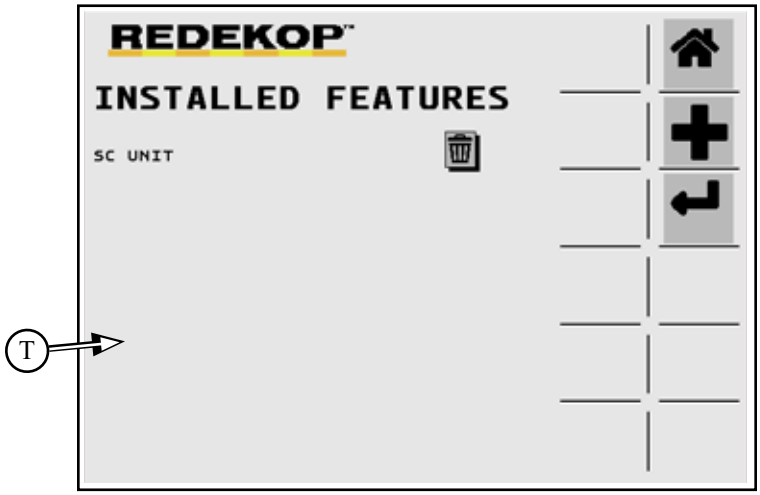
Select <Back Arrow> button (**R**) to display settings screen to save feature code



Select <Save> button (**S**)

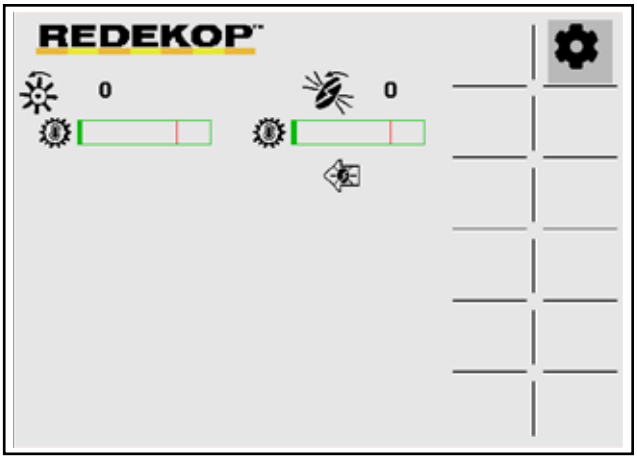


Installed Features screen now displays in gray (**T**)



7.4 Redekop Screen

REDEKOP page is displayed and ECU verified connected



To create a Redekop run screen, see 4.8 or consult your combines operators manual

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

(**A**) = Chopper Operating Speed

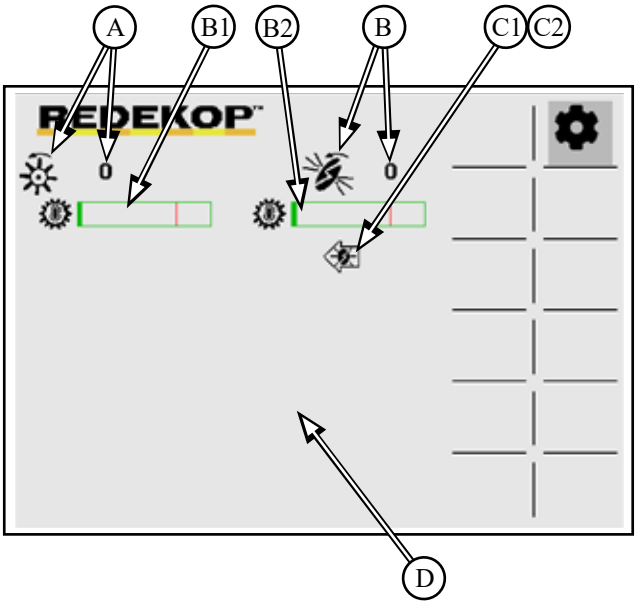
(**B**) = SCU Operating Speed

(**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.

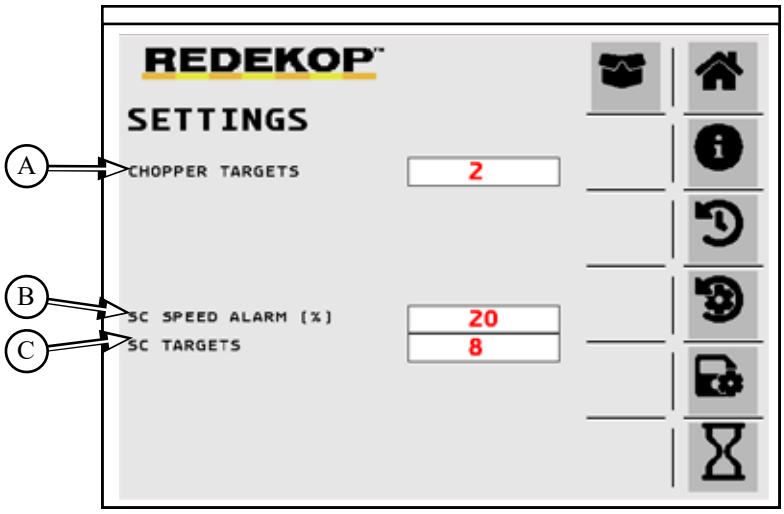


7.5 Settings Screen

CHOPPER TARGETS (**A**) - targets recorded per revolution of the chopper shaft (default is 2 for JD X-Series)

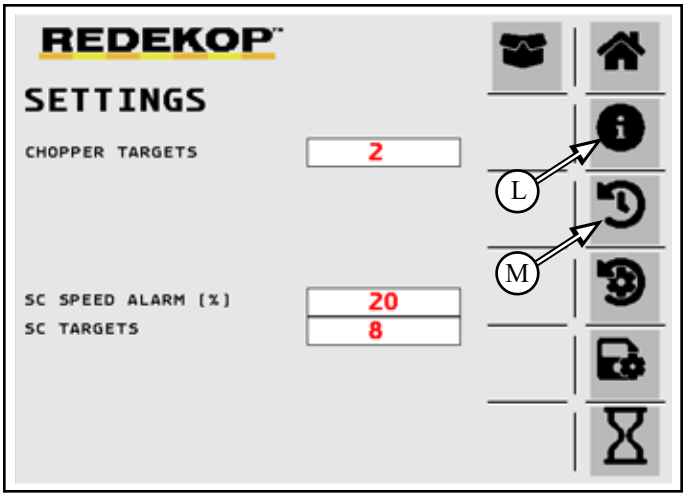
SC SPEED ALARM (**B**) - the alarm setpoint % below the maximum recorded speed measured during system startup - default is 20% (if the speed drops by 20% the alarm will go off)

SC TARGETS (**C**) - targets recorded per revolution of the SCU shaft (default is 8 for JD X-Series)



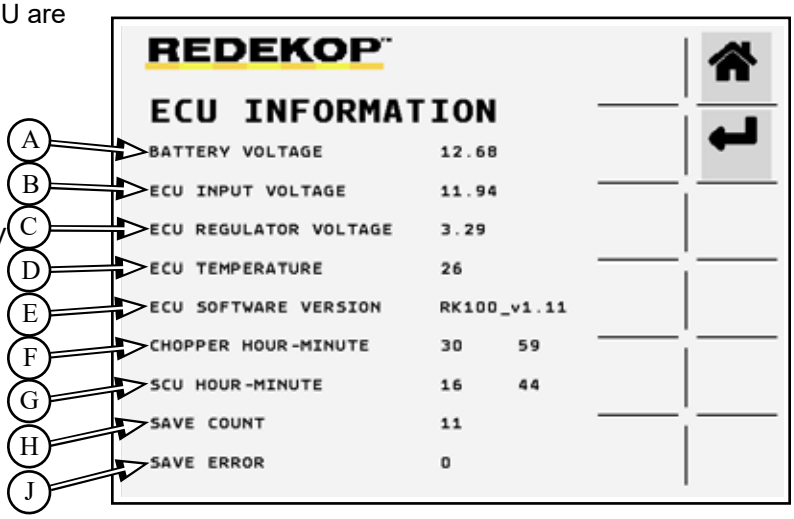
7.6 ECU Diagnostics Screen

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



7.6.1 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)

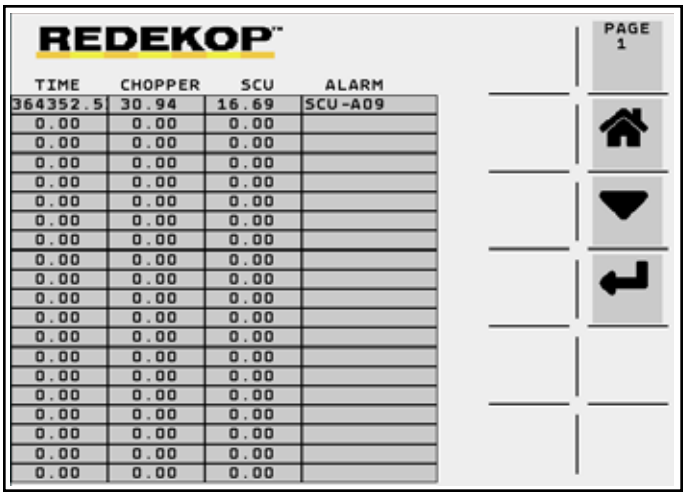
(**H**) Save Count - diagnostic value - above 0

(**J**) Save Error - diagnostic value - should be 0

7.6.2 Alarm History Screen

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

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



7.7 Alarms Display

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
Chaff Sense (Straw / Chaff Blockage)		Check for straw / chaff blockage

8 Appendix A

8.1 Bushing Installation and Removal

IMPORTANT: DO NOT USE LUBRICANTS IN THIS INSTALLATION

To Install Bushing:

1. Remove all paint, oil grease, etc. from tapered surface of bushing and bore of mating part.

2. See **Standard** mounting assembly - Figure 1.

NOTE: If bushing does not slide freely on shaft, wedge a screwdriver blade into the saw cut and the flange OD to open the bore of the bushing. Caution: Excessive wedging will split the bushing.

3. Standard Mount – Slide bushing on shaft, flange first. If using the setscrew, snug it against the key. **Excessive Torque will cause mating part to be eccentric.** Position mating part in place on bushing aligning drilled holes in mating part with tapped holes in bushing flange. Using lock washers, install capscrews thru the mating hub and into the bushing flange. (**Note:** S bushings can only be Standard Mounted. Be sure the three tapped holes in the mating hub **do not** align near the bushing saw cut. If they do, rotate the bushing 60 degrees).

4. Use A Torque Wrench.

Tighten all capcrews evenly and progressively in rotation to the torque value listed in the table.

Excessive wrench torque, closing the gap between the bushing flange and mating hub, or the use of lubricants will break the mating hub.

To Remove Bushing:

1. Loosen and remove all capscrews.

2. For **Standard Mount**, thread capscrews into tapped holes in mating part to jack against bushing flange. Tighten bolts evenly and progressively in rotation to separate the two components.

3. Loosen setscrew to slide bushing from shaft.

Standard Mounting

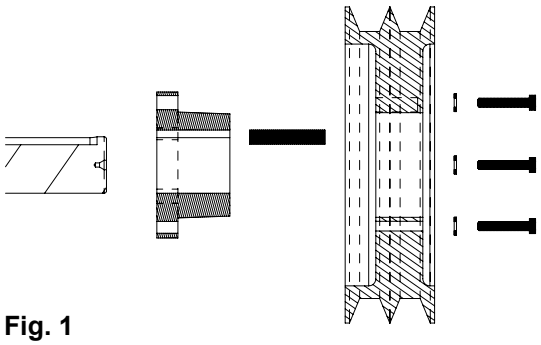


Fig. 1

Screw Tightening Information

Tapered Bushing	Size & Thread of Capscrew	Ft.-Lbs. To Apply With Torque Wrench
SK	5/16 - 18	15
SF	3/8 - 16	30

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)

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.

Notes:

REDEKOP MANUFACTURING

1.866.REDEKOP (1.866.733.3567)

Saskatoon, Saskatchewan Canada S7K 3J7
info@redekopmfg.com
www.redekopmfg.com

For additional and the most up to date Manuals:

REDEKOP™

REDEKOP™