REDEKOP™

MAV STRAW CHOPPER

CR SERIES

SCU READY

INSTALLATION MANUAL

PRODUCT NUMBER: **101-003W**

CH001-02_R4

REDEKOP™

CR Series
Complete Redekop MAV Chopper Installation Manual
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Component Reference

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3. Straw Door

4. Chopper

5. Chopper Drive - Jackshaft

6. Hydraulic Lines

7. Tailboard

9. Drive Shields

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0 Safety

0.1 Instructions

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

This instruction manual explains the proper procedure for installation of the Redekop MAV Chopper. 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 machine 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 MAV Straw Chopper and how to use controls properly. Do not let anyone operate without instruction.

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

Before moving away, always check immediate vicinity of machine (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.

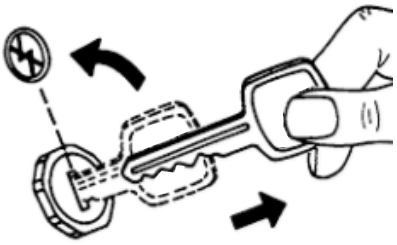
Never leave combine unattended as long as engine is running.

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 machine 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.

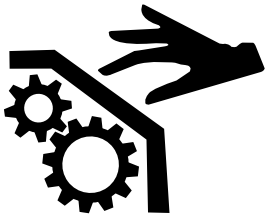
Securely support any machine elements that must be raised for service work.

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 machine 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 machine damage.

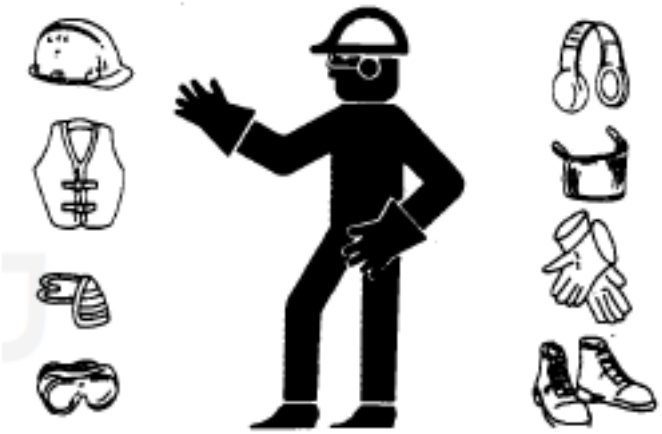
Follow recommended procedure for removal and installation of components in the manual.

Ensure lifting equipment is rated for the job

Ensure operator is appropriately licensed to operate lifting equipment

0.15 Personal Protective Equipment (PPE)

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



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

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

0.16 Sound Level

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

Hearing protection is required!

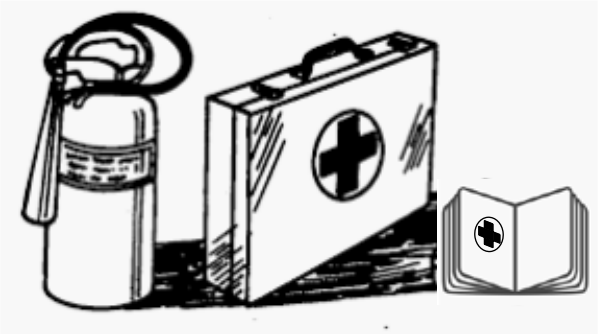
Interference with speech communication, acoustic signals is possible.

0.17 Prepare for Emergencies

0.17.1 Be prepared if a fire starts.

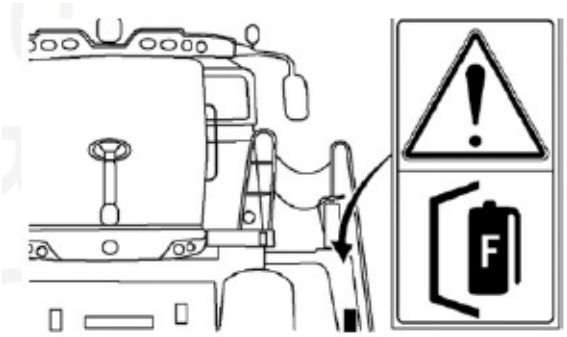
Keep a first aid kit and fire extinguisher handy.

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



0.18 Fire Extinguisher

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



Maintain fire extinguisher to keep it in operating condition.

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

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

0.19 Remove Accumulated Crop Debris

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

0.20 In the Event of Fire

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

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

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

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

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

0.21 Safety Decals

Hand Injury / Rotate Danger
RP871

Projectile Hazard / Stand Clear
RP872

Caution / Check Service Manual
RP873

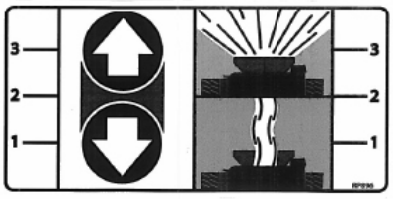
Keep Hands out of Belt Area
RP874

High Pressure Fluid Hazard / Check Service Manual
RP876

Pinch Point Hazard
84394351

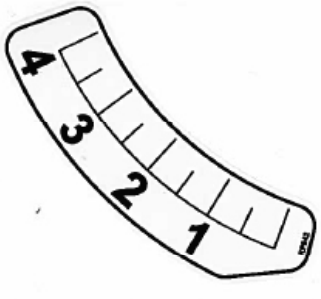
0.22 Information Decals

Windrow Floor Adjustment
Wide Spread / No Spread
RP896



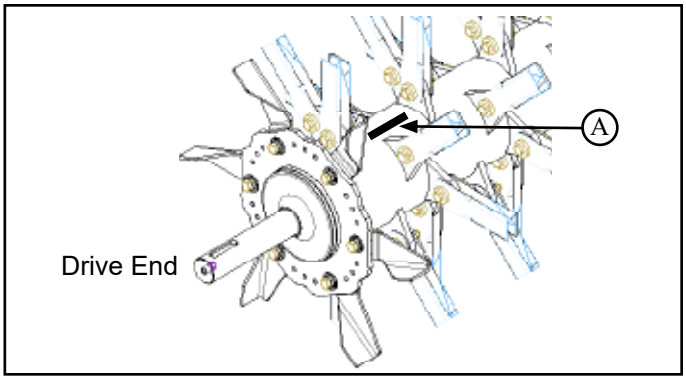
Redekop Serial Number Plate
RP1171

Knifebar Adjustment
RP942



0.23 Serial Number

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



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

Master Power

1. Shut off engine, remove keys from the combine cab
2. Block wheels on level ground
3. Lift up the left rear side access panel
4. Turn Master Power Off (**A**)

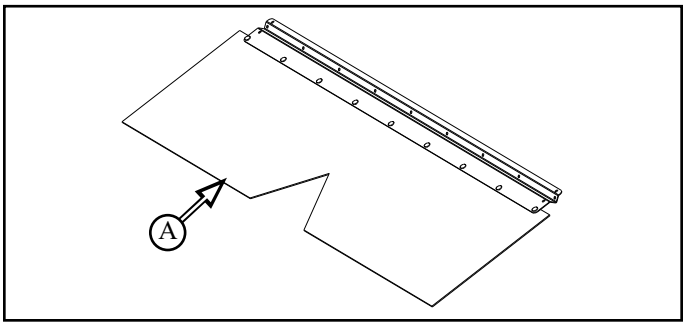
1 Sieve Extension

If SCU is being installed, reference SCU Installation manual for parts and procedure

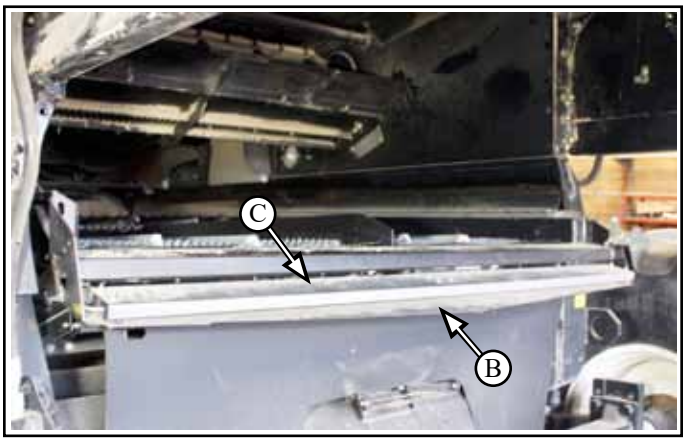
1.1 Sieve Extension Installation (without SCU)

Parts List:

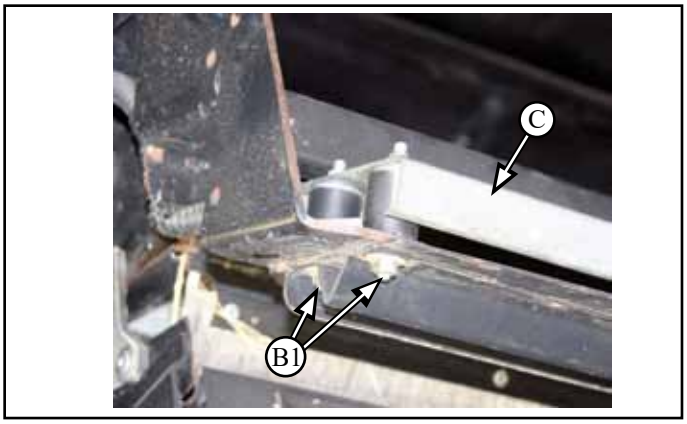
CH738BA Sieve Extension Assy CR (**A**) Qty 1



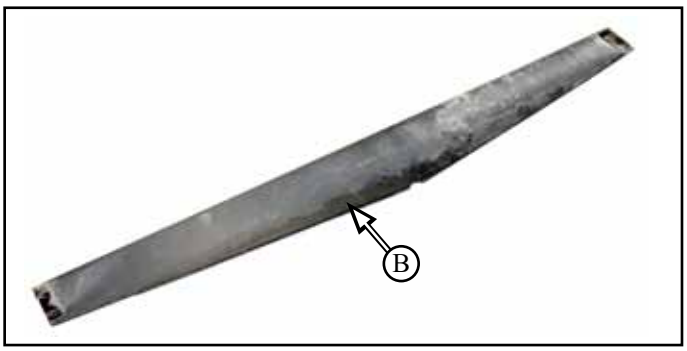
1.1.1 Remove bottom plate (**B**) from OEM grain loss monitor (**C**)



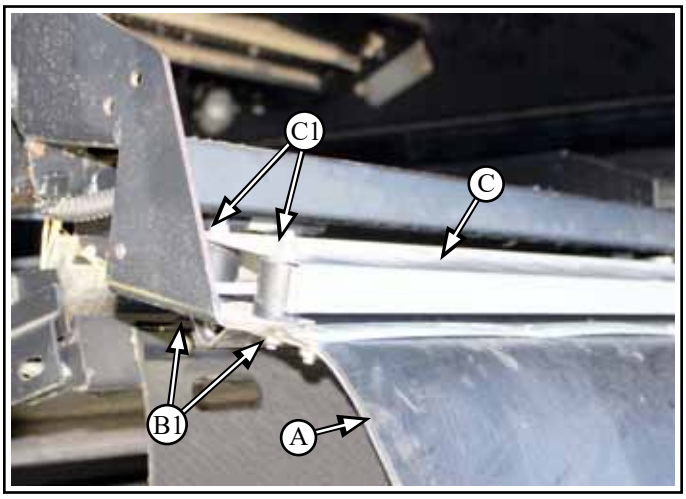
1.1.2 Remove existing nuts and flat washers (**B1**) x4 from both sides of bottom of grain losss monitor (**C**)
- hardware to be reused



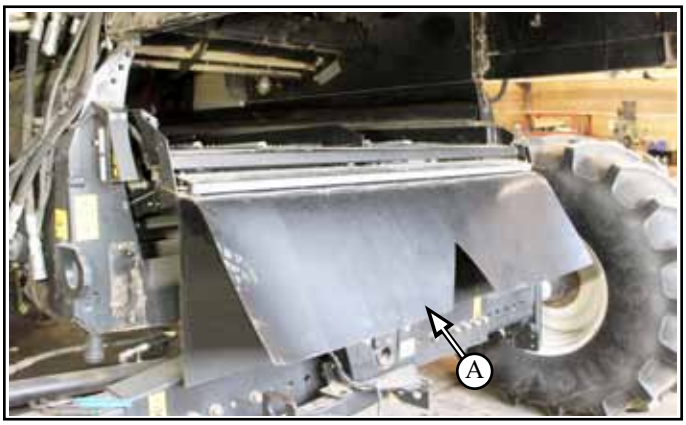
1.1.3 Bottom plate (**B**) removed
- discard



1.1.4 Install sieve extension assembly (**A**) to the bottom of grain loss monitor (**C**) on to existing bolts (**C1**), with
- reuse existing hardware (**B1**) x4
** Do Not use an impact to tighten these, for they strip easily **



1.1.5 Installed sieve extension (**A**)



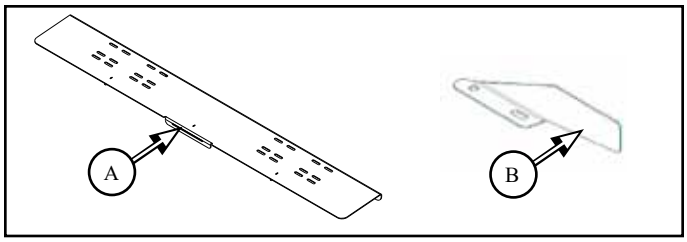
Do Not pinch grain loss sensor wire when installing sieve extension!

2 Chaff and Internal Deflector Fins

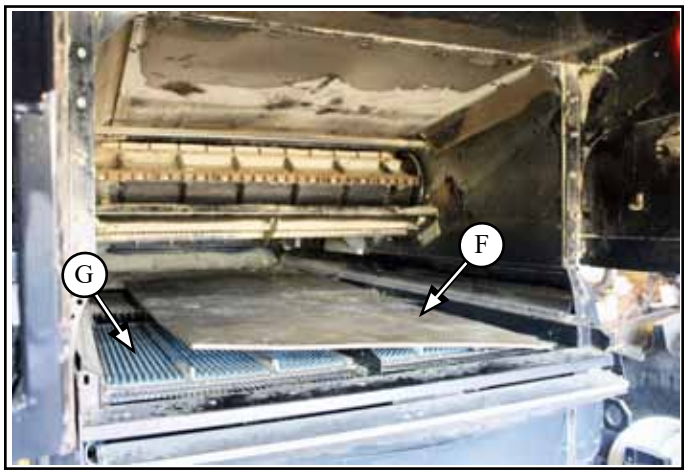
2.1 Internal Deflector Fin Installation

Parts List:

CH737B	Beater Extension CR **(A)**	Qty 1
CD733B	Internal Deflector Fin **(B)**	Qty 2



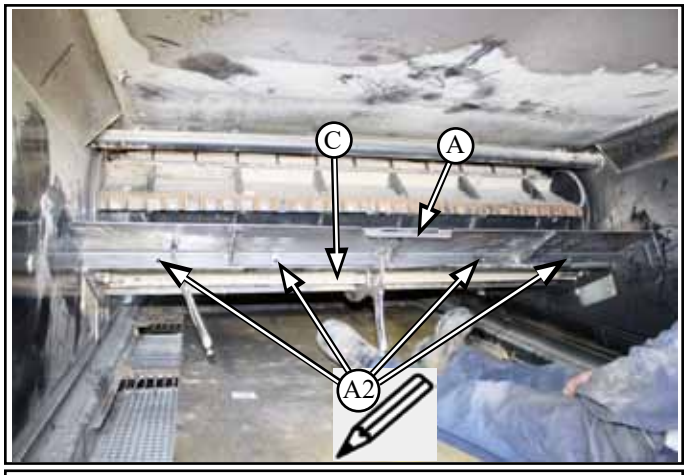
2.1.1 Lay plywood (**F**) on top of sieve (**G**) to prevent damaging sieve



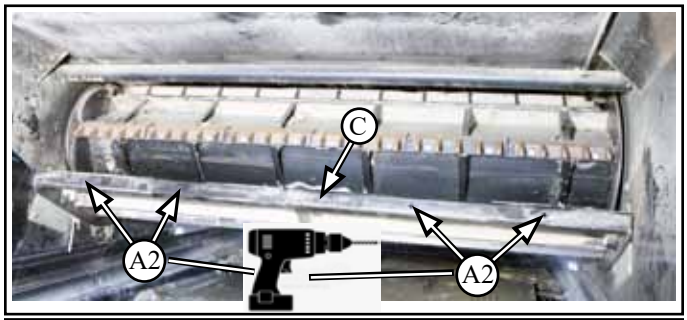
2.1.2 Clamp beater extension (**A**) to edge and flush to top of beater floor (**C**)

2.1.2.1 Mark holes (**A2**) x4 to be drilled

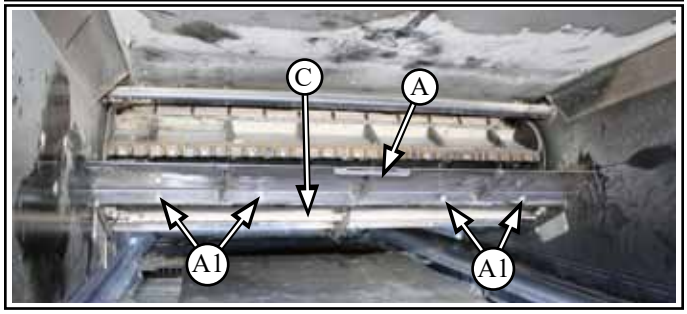
2.1.2.2 Remove beater extension (**A**)



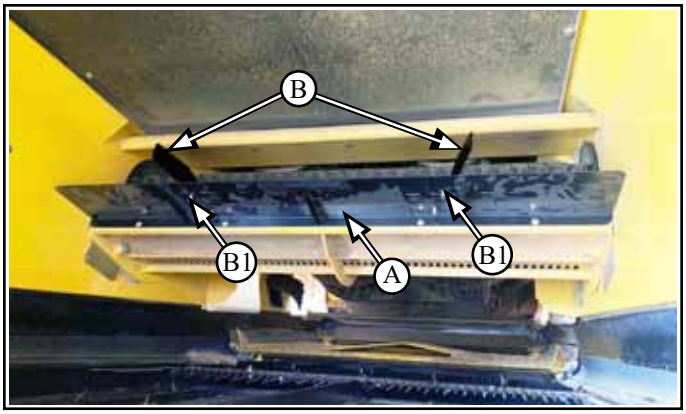
2.1.3 Drill 11.5mm (.4375 in) holes (**A2**) x4 at marked locations



2.1.4 Install beater extension (**A**) to beater floor (**C**), with:
- M10 x 20 flange head bolt and flange nut (**A1**) x4



2.1.5 Mount internal deflector fins (**B**) onto top of beater extension plate (**A**) with:
- M8 x 16 round head bolt and flange nut (**B1**) x4
- ensure head of bolt is on top



INTERNAL DEFLECTOR SETTING

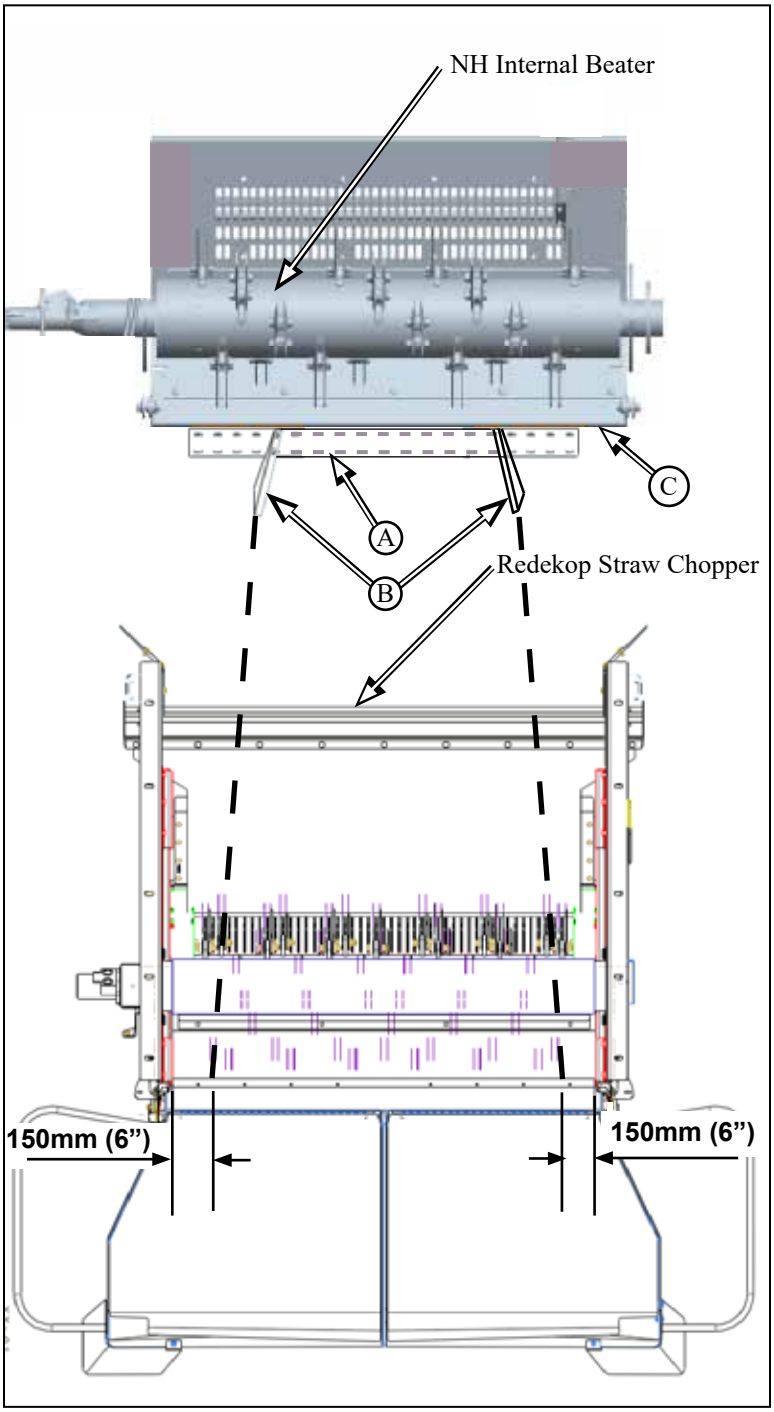
The internal deflectors (**B**) are used to adjust and distribute straw evenly into the Redekop Straw Chopper

2.1.6 Adjust angle of deflector fins (**B**) starting with deflectors set as shown:

- position left and right deflector fins (**B**) aimed 150mm (6”) inwards from left and right rear of chopper

This is the typical layout for most applications. Adjust angle, spacing of deflector to obtain even distribution

Check distribution by windrowing. If the swath is even, the distribution into the straw chopper will be even

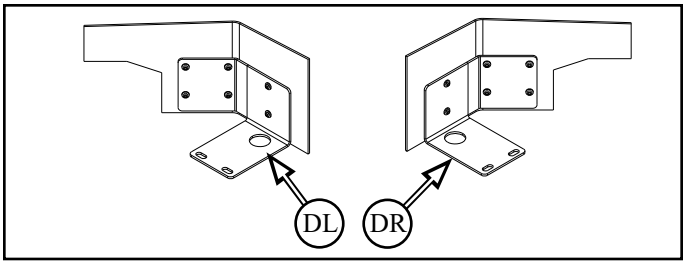


Plan View

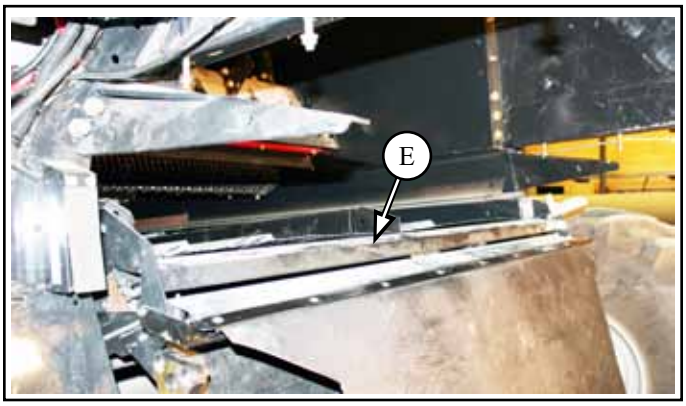
NOTE:
Residue must be evenly distributed across the width of the chopper.
Each user may be required to adjust the angle of fins or fin type due to different crop conditions or combine performance.

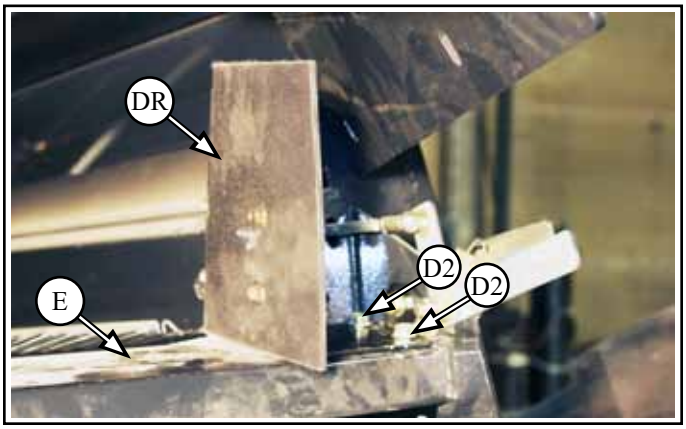
2.2 Chaff Deflector Installation

Parts List:
CS599BAL Sieve Ext. Deflector Lt Assy (**DL**) Qty 1
CS599BAR Sieve Ext. Deflector Rt Assy (**DR**) Qty 1

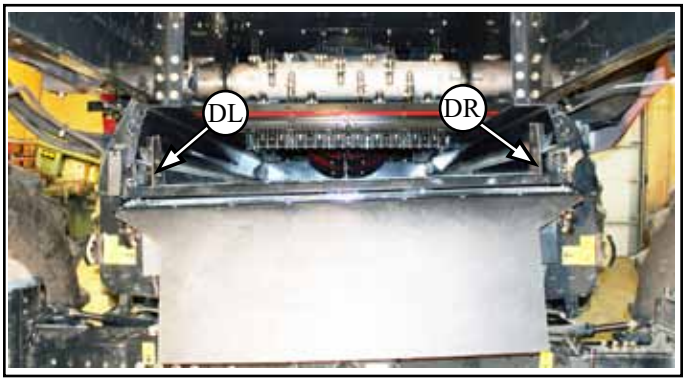


2.2.1 Install deflector (**DR**) at end of the sieve (**E**) into existing holes, with:
- M8 x 25 flange bolts and flange nuts (**D2**) x2
- repeat for other side





2.2.2 Installed deflectors (**DL**) and **(DR)** view.

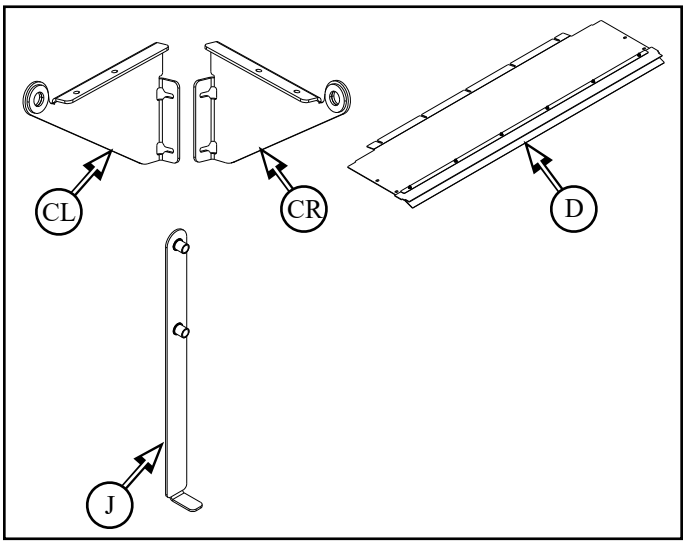


3 Straw Door

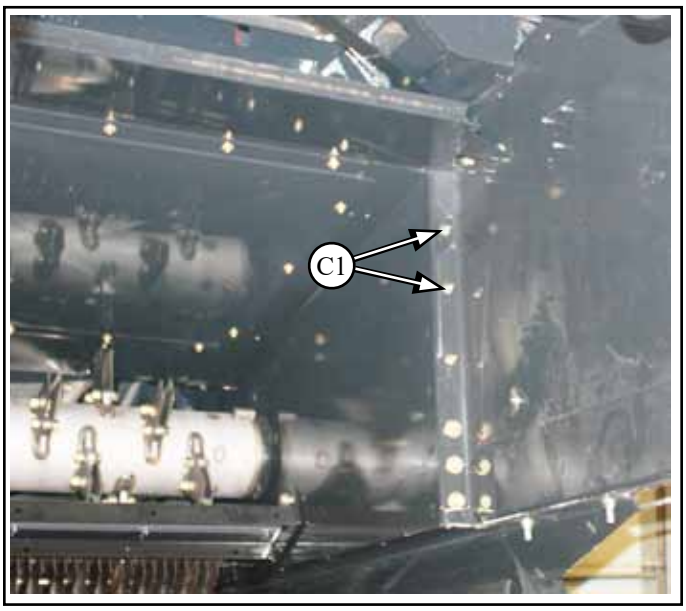
3.1 Hood and Straw Door Mount Bracket Installation

Parts List:

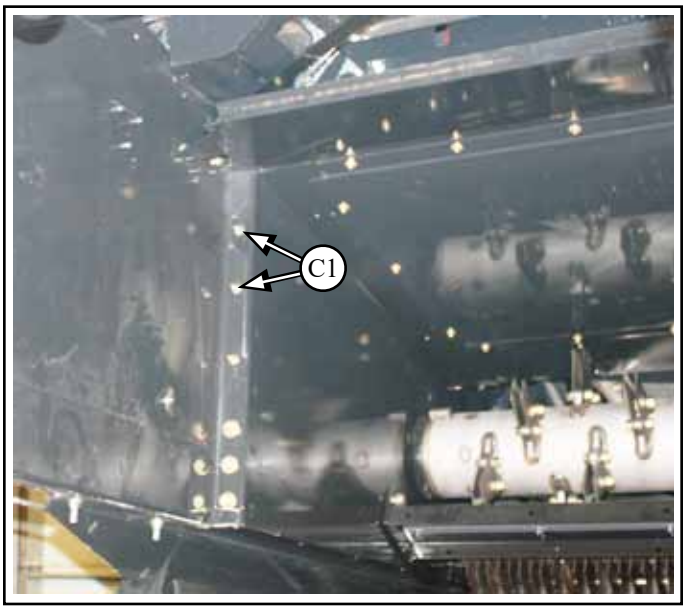
CH726BL	Straw Door Mt Brkt Left (**CL**)	Qty 1
CH726BR	Straw Door Mt Brkt Right (**CR**)	Qty 1
CH727BA	Hood Assy CR (**D**)	Qty 1
SC1224BA	Backing Strap (**J**)	Qty 1



3.1.1 Right Side:
Remove the upper 2 nuts (**C1**) from front corner of combine wall
- not to be reused



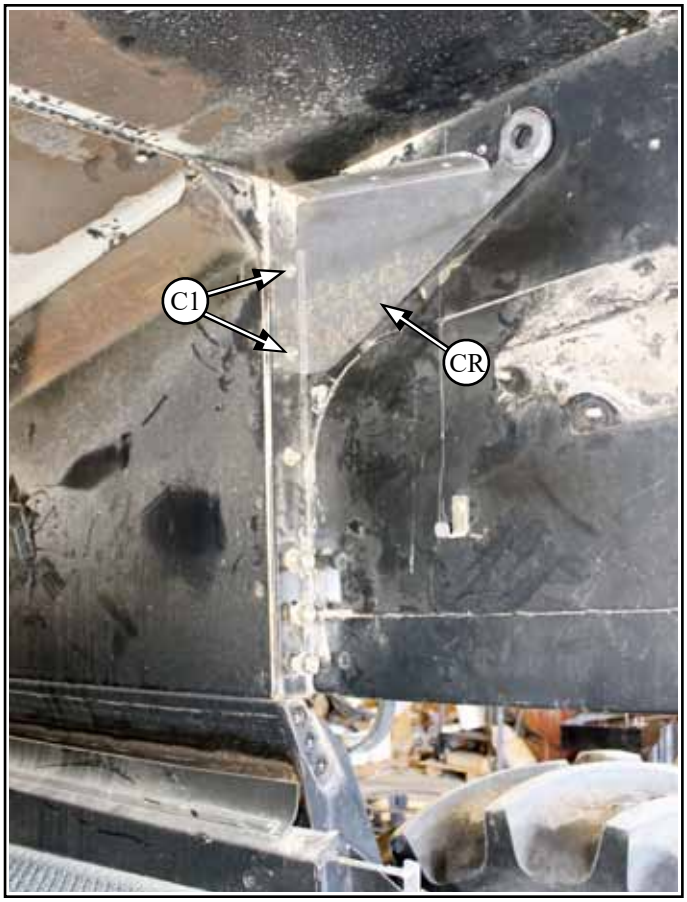
3.1.2 Left Side:
Loosen the upper 2 nuts (**C1**) from front corner of combine wall enough to allow brackets to fit in between wall and nuts
** **Do Not remove the nuts** **



3.1.3 Install right side straw door mount bracket (**CR**):

3.1.3.1 From outside of combine, insert backing strap (**J**) in gap and slide up until nutserts in bracket align with holes in combine wall (**C1**)

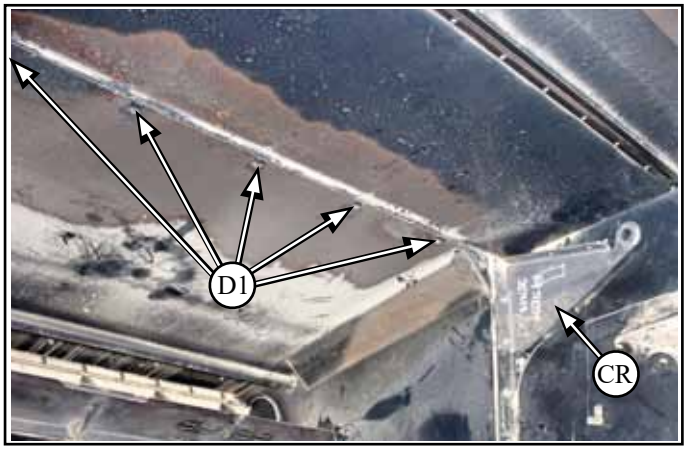
3.1.3.2 Install straw door mount bracket (**CR**) to combine wall, with:
- M10 x 30 hex head bolt and flat washer (**C1**) x2 into nutserts in mount bracket (**E**)



3.1.4 Install left side straw door mount bracket (**CL**):

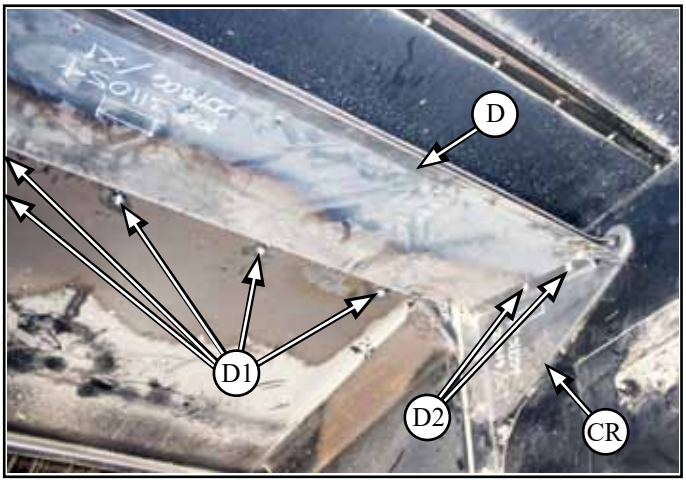
3.1.4.1 Slide straw door mount bracket (**CL**) onto upper studs (**C1**) x2 on front corner of combine wall
- tighten into place

3.1.5 Loosen rear most upper bolts (**D1**) x5 in roof panel - do not remove bolts



3.1.6 Slide hood (**D**) over straw door mount brackets (**C**) and in between roof panels aligning with bolts (**D1**) x5

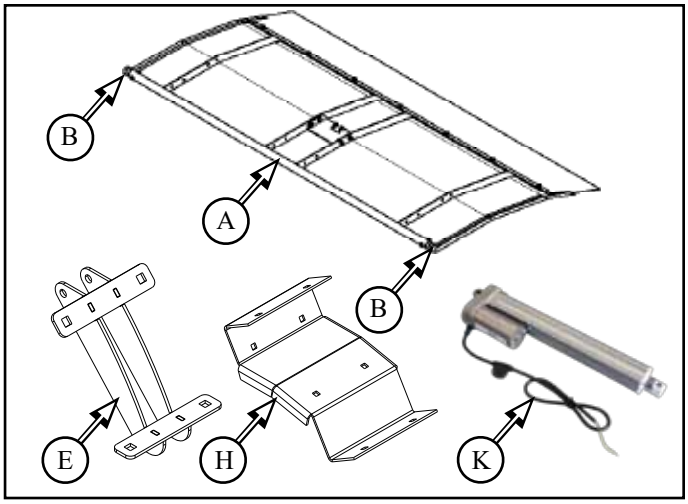
3.1.7 Fasten to straw door mount brackets (**CL** & **CR**), with:
- M10 x 20 flange head bolt and flange nut (**D2**) x4



3.2 Straw Door Installation

Parts List:

CH728BA	Straw Door Assembly CR (**A**)	Qty 1
CH729Z	Pin AFX Straw Door (**B**)	Qty2
CH730B	Straw Door Clevis Mt Brkt (**E**)	Qty 1
CH772B	Actuator Mt Brkt Non PSD (**H**)	Qty 1
RP1238	Actuator (**K**)	Qty 1

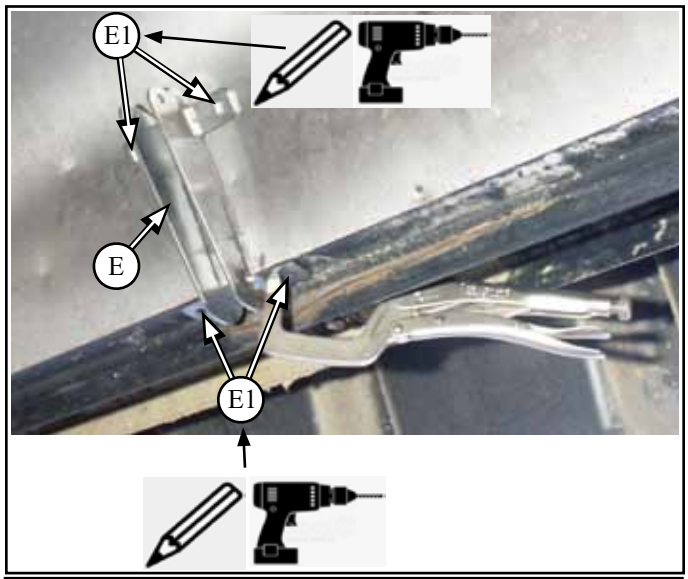


3.2.1 Straw Door Actuator Clevis Bracket Installation with PSD

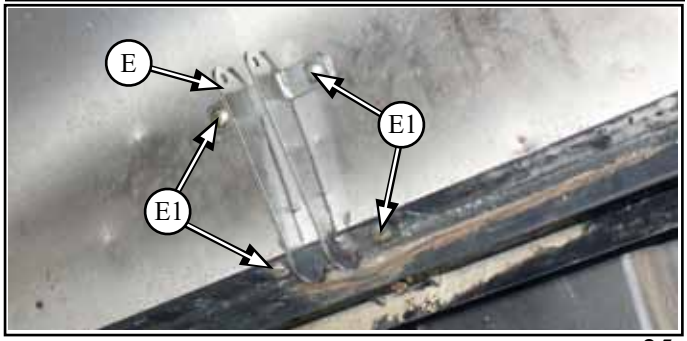
3.2.1.2 Clamp straw door actuator mount bracket (**E**) to bottom lip of rear combine wall - centered

3.2.1.2 Mark holes (**E1**) x4 to be drilled

3.2.1.3 Drill 9.5mm (.375 in) holes (**E1**) x4



3.2.1.4 Install bracket (**E**) into place, with:
- M8 x 16 round head bolt and flange nut (**E1**) x4



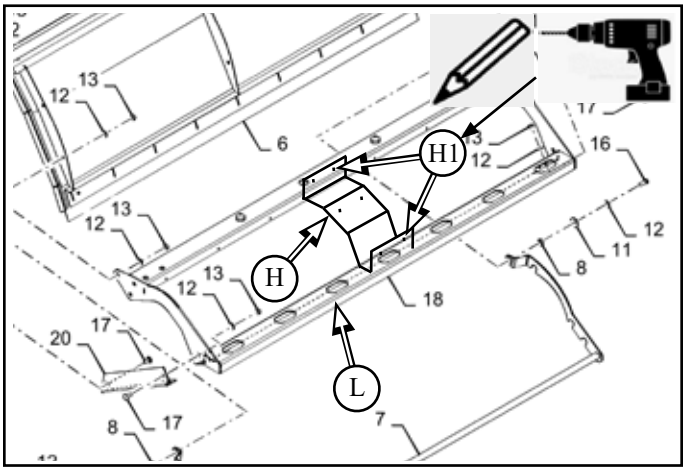
3.2.2 Straw Door Actuator Clevis Bracket Installation without PSD

3.2.2.1 Clamp non PSD straw door actuator mount bracket (**H**) to frame (**L**) of combine - centered

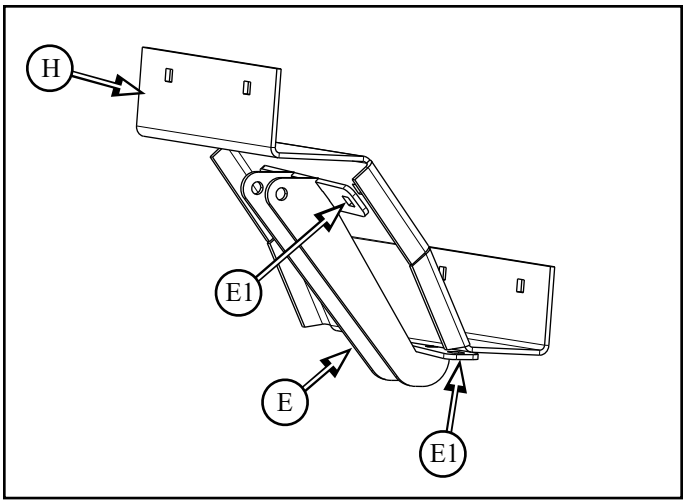
3.2.2.2 Mark holes (**H1**) x4 to be drilled

3.2.2.3 Drill 9.5mm (.375 in) holes (**H1**) x4

3.2.2.4 Install bracket (**H**) into place, with:
- M8 x 16 round head bolt and flange nut (**H1**) x4

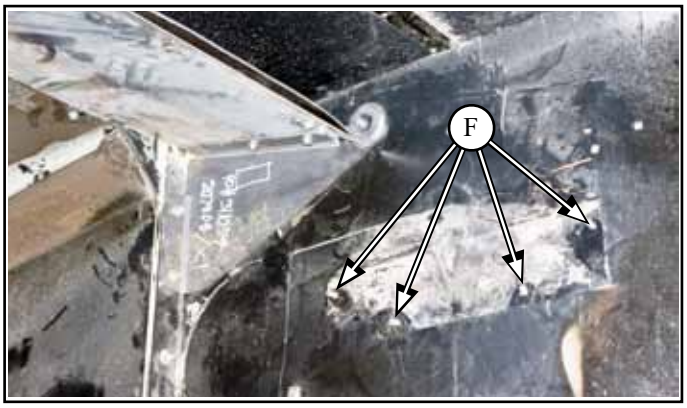


3.2.2.5 Install clevis mount bracket (**E**) to non PSD mount bracket (**H**), with:
- M8 x 16 round head bolt and flange nut (**E1**) x4

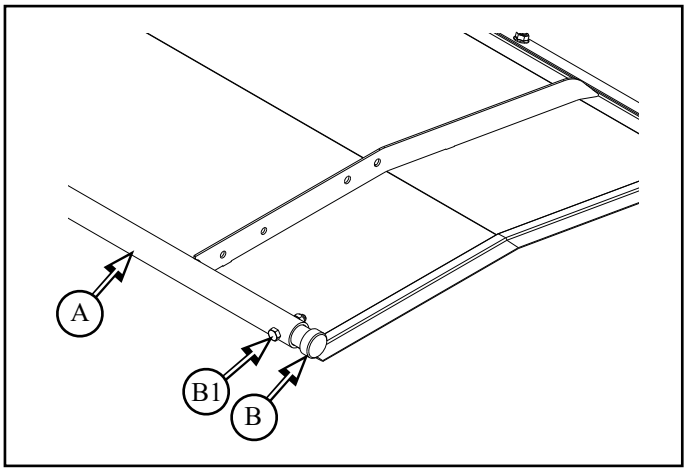


3.2.3 Straw Door Installation

3.2.3.1 Bolts (**F**) x4 in right wall have to be removed, either push into the wall cavity or grind off



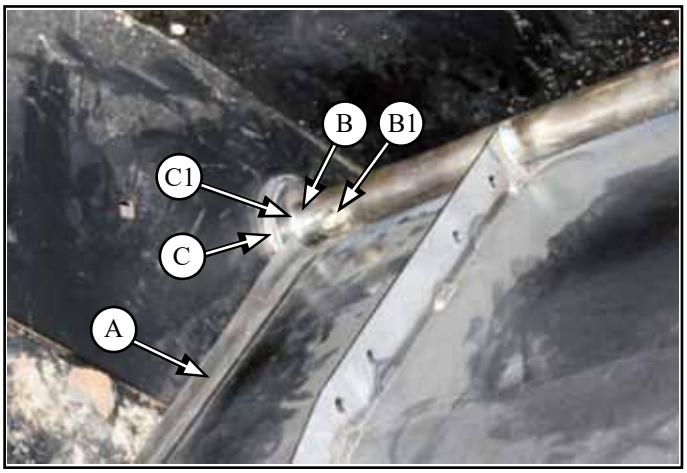
3.2.3.2 Remove the hardware (**B1**) securing the pins (**B**) in the ends of the straw door (**A**)
- both sides
- to be reinstalled
- leave pins in door tube



3.2.3.3 Slide straw door (**A**) up to straw door mount brackets (**C**) and align pins (**B**) with pivot holes (**C1**)

3.2.3.3.1 Slide pins (**B**) into pivot holes (**C1**)

3.2.3.3.2 Secure pins (**B**) x2 in place:
- reuse hardware (**B1**)

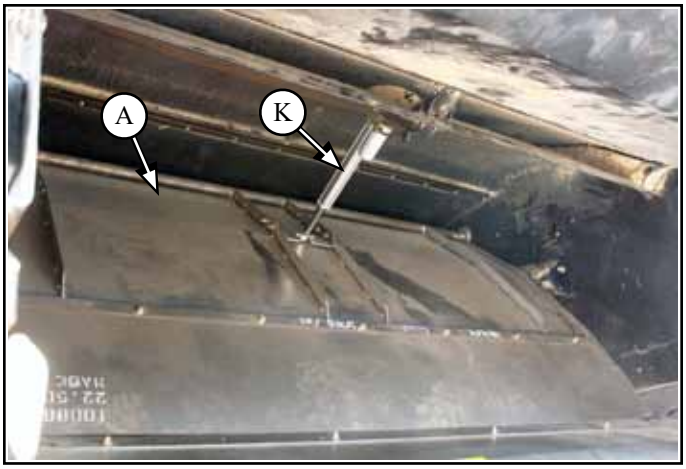


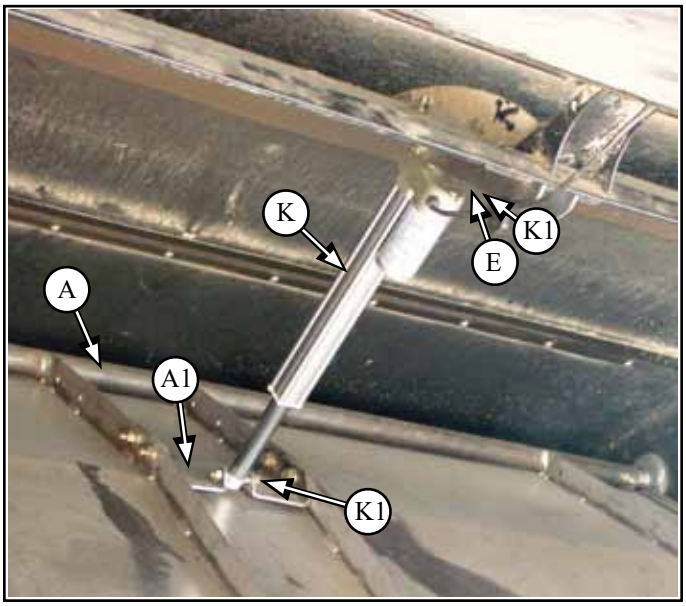
3.2.3.4 Straw door (**A**) installed

3.2.4 Straw Door Actuator Installation

3.2.4.1 Mount base of actuator (**K**) to top bracket (**E**), with:
- M8 x 50 hex head bolt, flat washer and lock nut (**K1**)

3.2.4.2 Mount arm of actuator (**K**) to mount plate (**A1**) on straw door (**A**), with:
- M8 x 50 hex head bolt, flat washer and lock nut (**K1**)

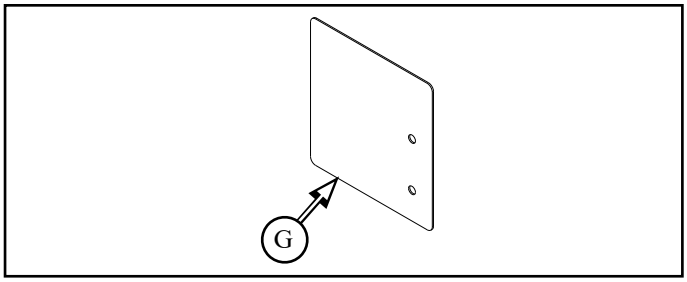




3.3 Hyd Motor Hole Cover Plate Installation - if equipped with PSD

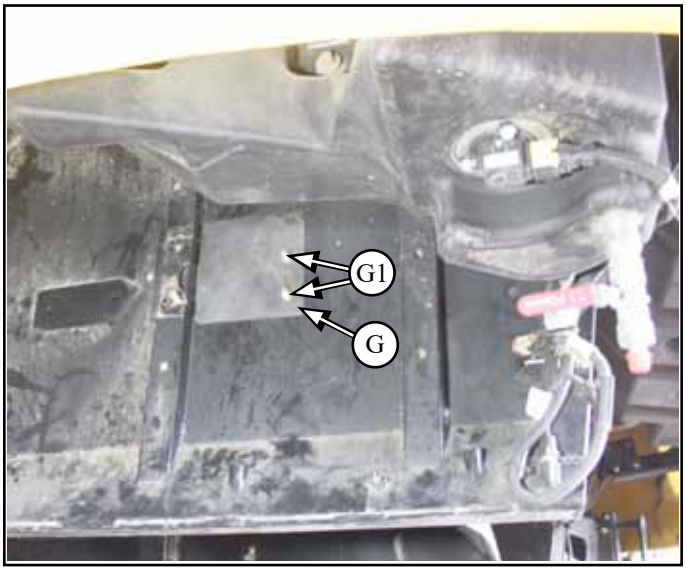
Parts List:

CH746B Hyd Motor Hole Cover Plate (**G**) Qty 1

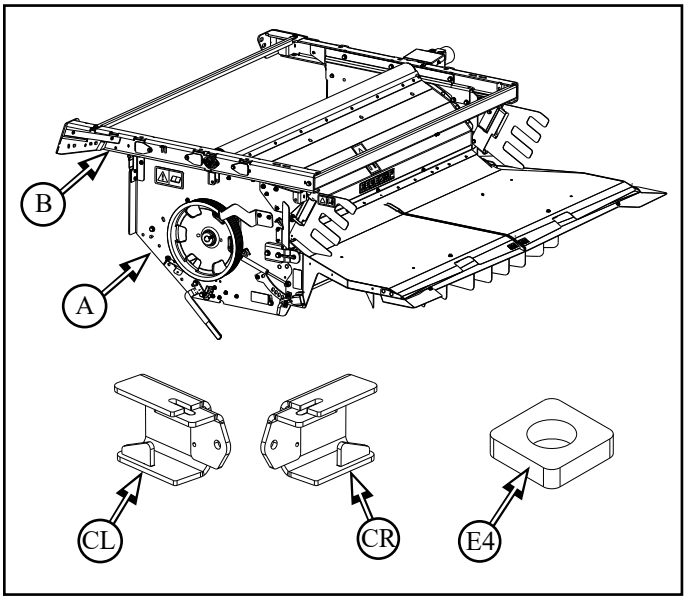


3.3.1 Install cover plate (**G**) over holes from hydraulic motor (**G2**) with:

- M8 x 16 round head bolt and flange nut (**G1**) x2
- ensure head of bolt is on inside of combine wall



4 Chopper Installation

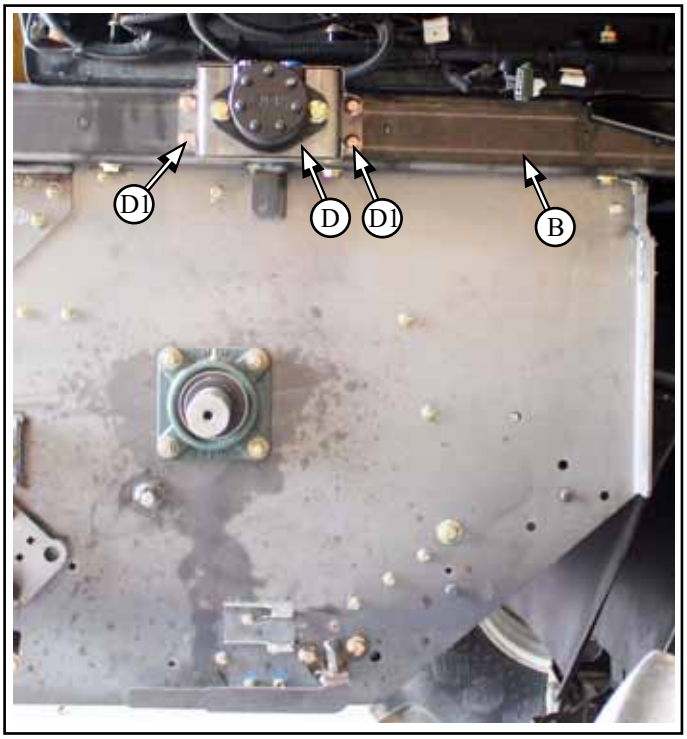


4.1 Chopper Installation

Parts List:

CH789BA	CR MAV Chopper SCU ready (**A**)	Qty 1
	- with Interface (**B**) installed	
CS787BL	Chopper Slide Stop Lt (**CL**)	Qty 1
CS787BR	Chopper Slide Stop Rt (**CR**)	Qty 1
CH753Z	Washer Square 1x1x.25 (**E4**)	Qty 6

4.1.1 Remove hydraulic motor mounting bracket (**D**) from interface (**B**)
- allows access to chopper mounting bolt
- to be reinstalled after chopper is installed



4.1.2 With a forklift, raise the Chopper (**A**) and align the interface rails to the combine bottom mounting flanges

CAUTION

This component weighs 1500 lbs / 680 kg
Use a forklift with appropriate capacity

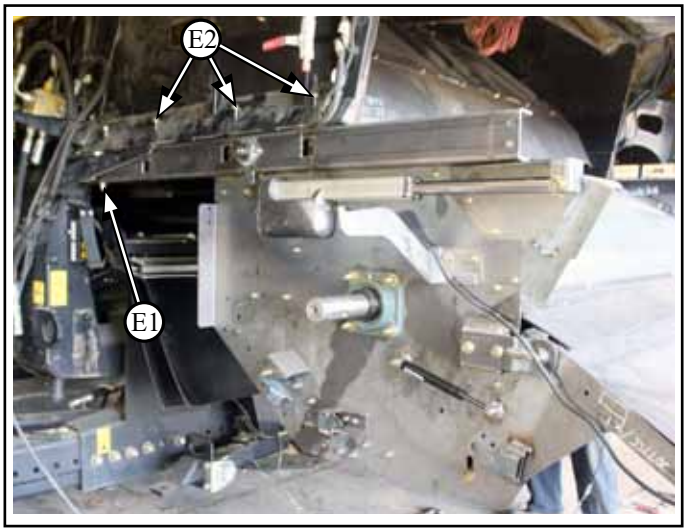
CAUTION

HAZARD / FALLING
Proper Safety Shoes and Apparel must be worn.
Pinching Hazard

Leave Chopper strapped to the pallet during installaion. Cut straps off after mounted to combine.

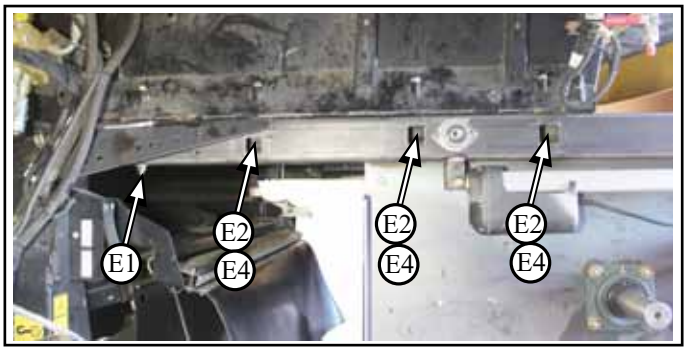
4.1.3 Fasten interface rails to bottom of combine flange with:
Front bolt (**E1**):
- M12 x 200 hex head bolt (new)
- reuse existing hardware: flat washer, heavy duty flat washer, lock washer (new), flange nut
- both sides

E1:
M12 x 200 hex head bolt - new
Flat washer - reuse
Heavy duty washer - reuse
Lock washer - new
Flange nut - reuse



Rear 3 bolts (**E2**) x3:
- M12 x 110 hex head bolt (new)
- reuse existing hardware: flat washer, heavy duty square washer (**E4**) (new), lock washer, flange nut
- both sides

E2:
M12 x 110 hex head bolt - new
Flat washer - reuse
Heavy duty square washer (**E4**) - new
Lock washer - new
Flange nut - reuse

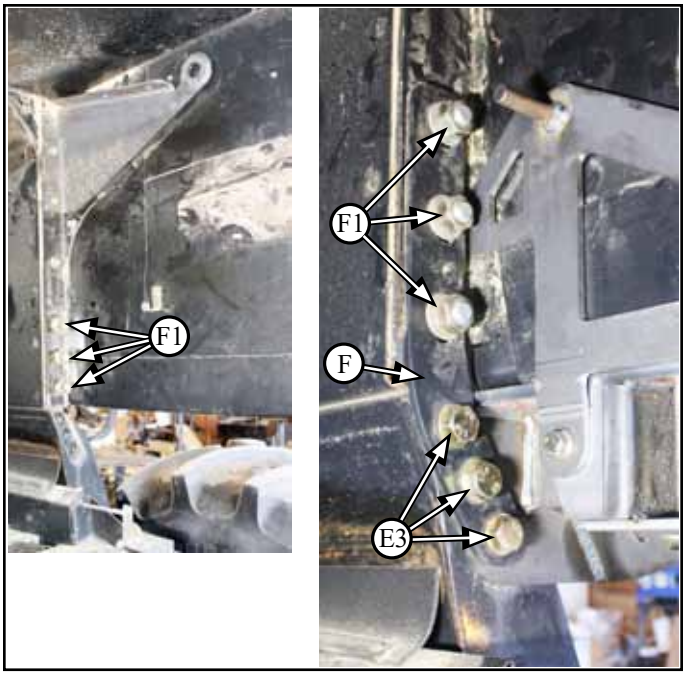


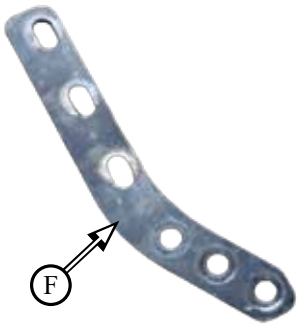
4.1.4 Remove upper nuts (**F1**) x3
- to be reused
- both sides

4.1.5 Install spacer bar (**F**) onto studs (**F1**) and align with bottom holes (**E3**), with
- reuse nuts (**F1**)
- both sides

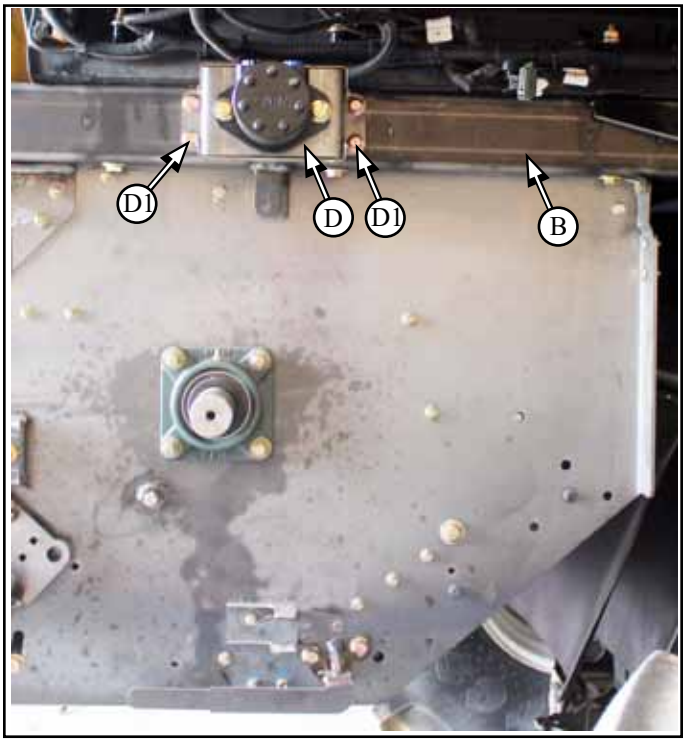
4.1.5.1 Fasten front of chopper interface rail to rear of combine wall and spacer bar (**F**), with:
- reuse existing hardware:
  - M16 x 40 hex bolt, flat washer (**E3**) x3
- both sides

4.1.5.2 Ensure chopper is square to combine
- tighten mounting hardware (**E1**, **E2**, **F1** & **E3**)

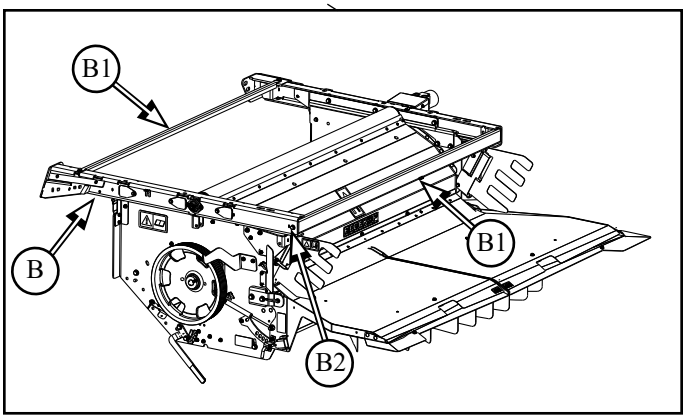




4.1.6 Reinstall hydraulic motor mounting bracket (**D**) onto interface (**B**), with
- reuse existing hardware (**D1**)

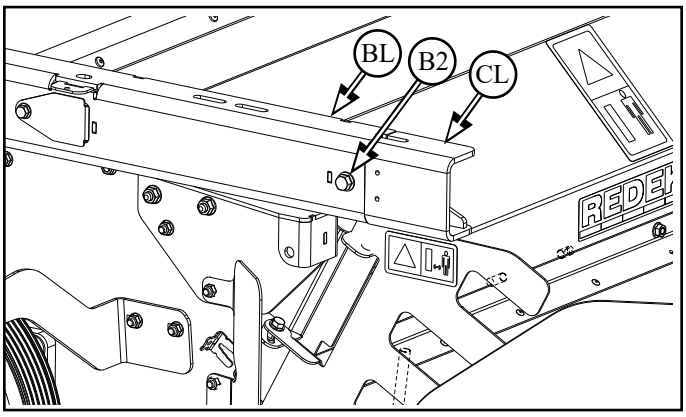


4.1.7 Remove front and rear brace (**B1**) from interface (**B**)
- braces not to be reused
- brace mount hardware (**B2**) x2 to be reused



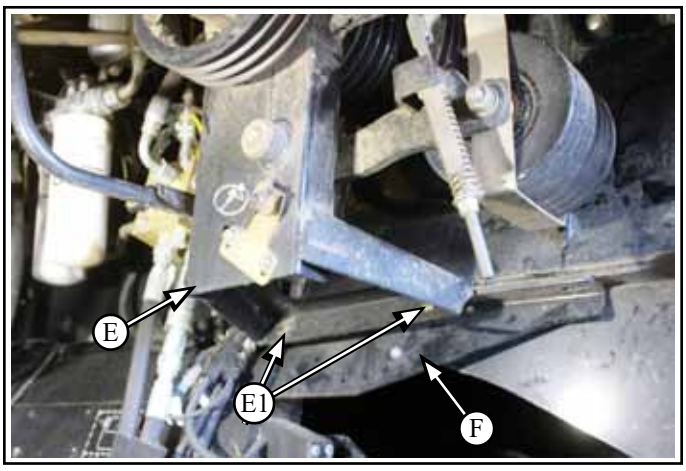
4.1.8 Install chopper slide stop (**CL**) into rear of interface channel (**BL**), with:
- reuse brace mount hardware (**B2**)
- do not install bolt in top hole at this time

4.1.8.1 Repeat for right side



4.1.9 Reinstall bottom of jackshaft (**E**) to support plate (**F**), with:
- reuse mounting hardware (**E1**) x2

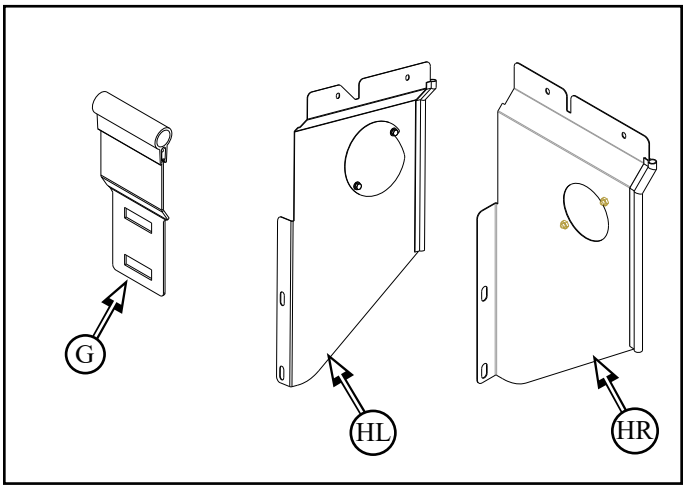
*** Only if SCU is not being installed ***



4.2 Chopper Slide Seal and Vent Cover Installation

Parts List:

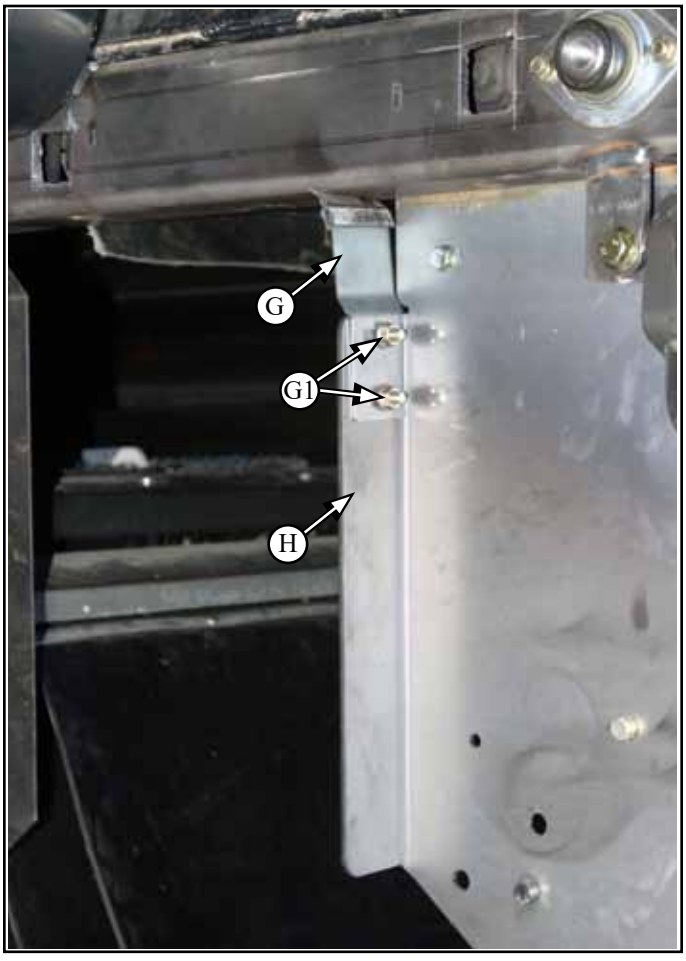
CH719BA	Chopper Slide Seal Assy (**G**)	Qty 2
CH741BAL	Vent Cover Assy Lt (**HL**)	Qty 1
CH741BAR	Vent Cover Assy Rt (**HR**)	Qty 1



*** Only if SCU is not being installed ***

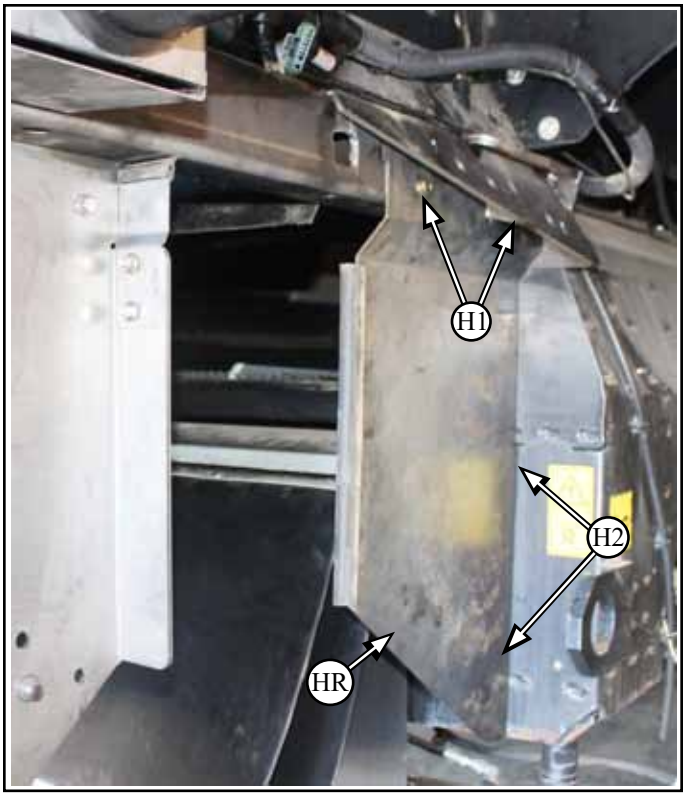
Leave off until SCU has been installed

4.2.1 Install chopper slide seal (**G**) to front of chopper (**A**), with:
- M8 x 16 round head bolt and flange nut (**G1**) x2
- both sides



4.2.2 Install vent cover assembly (**HR**) to right rear of combine, with:
- M8 x 20 flange bolt and flange nut (**H1**) x2 (top)
- M12 x 25 flange bolt and flange nut (**H2**) x2 (side)

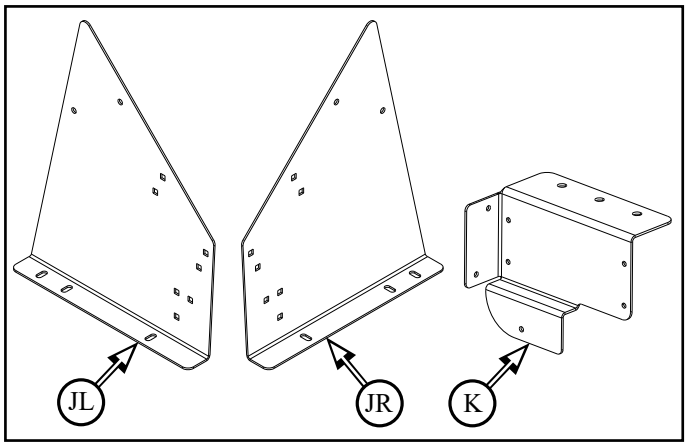
4.2.3 Repeat for left side



4.3 Rear Panel and Switch Mount Plate Installation

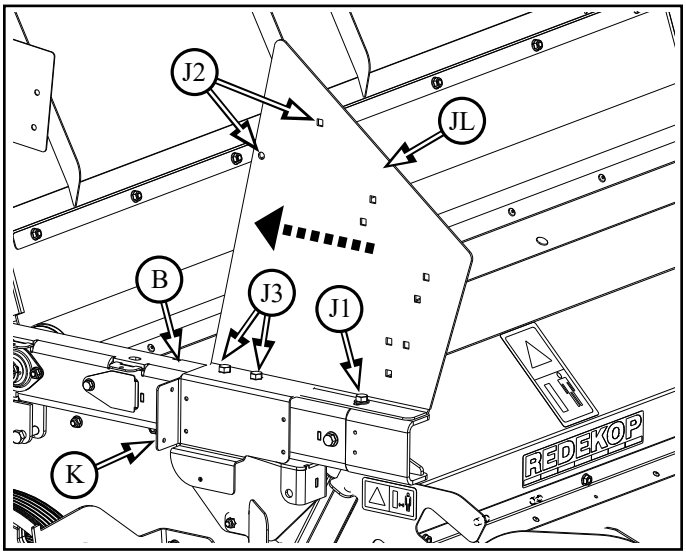
Parts List:

CH745BL Panel Rear CR Chopper Lt (**JL**)	Qty 1
CH745BR Panel Rear CR Chopper Rt (**JR**)	Qty 1
CS1116B Switch Mount Plate (**K**)	Qty 1

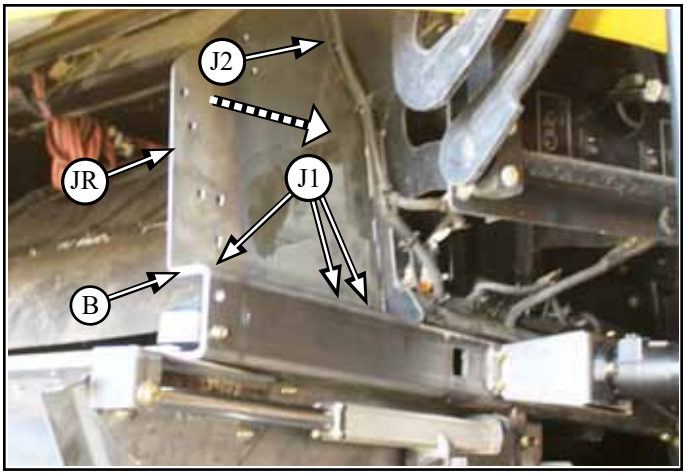


4.3.1 Install left rear panel (**JL**) on to interface (**B**) with:
- M10 x 30 flange bolt and flange nut (**J1**)
- M8 x 25 flange bolt and flange nut (**J2**)
- push panel forward to be tight to combine rear wall

4.3.2 Install switch mount plate (**K**) on to interface (**B**) through rear panel (**JL**), with:
- M10 x 30 flange bolt and flange nut (**J3**) x2

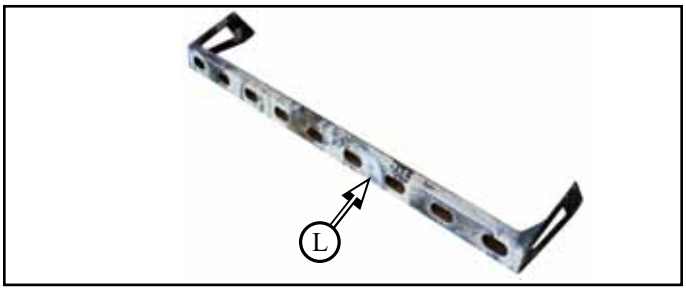


4.3.3 Install right rear panel (**JR**) on to interface (**B**) with:
- M12 x 25 flange bolt and flange nut (**J1**) x3
- M8 x 25 flange bolt and flange nut (**J2**)
- push panel forward to be tight to combine rear wall



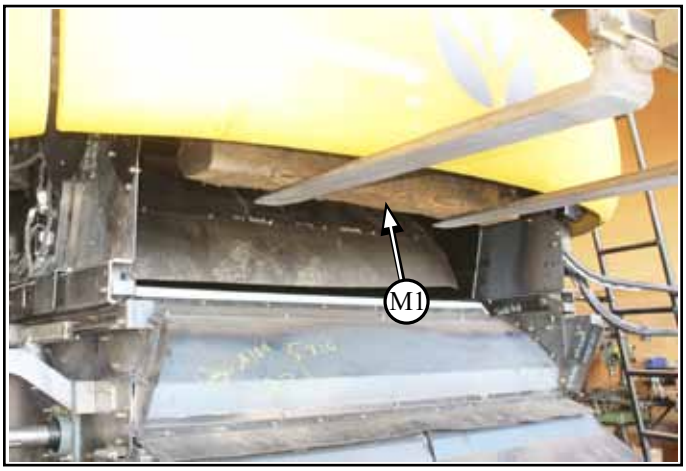
4.4 Fuel Tank Support Reinstallation

Parts List:
OEM Fuel tank support (**L**) - previously removed



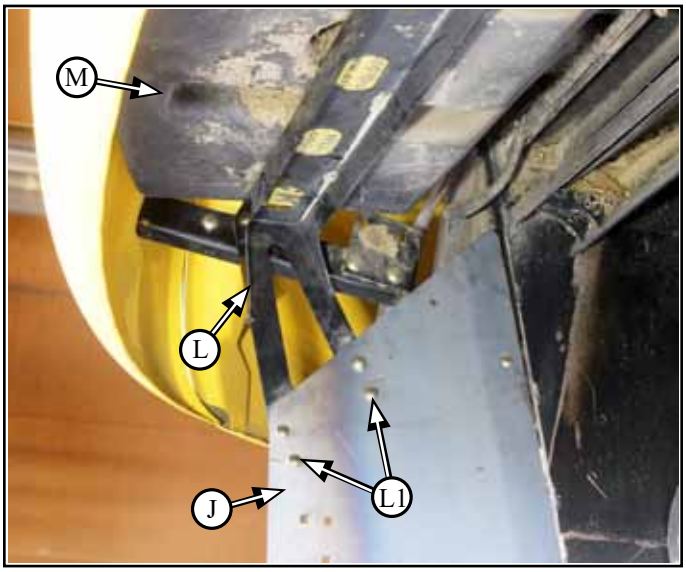
4.4.1 Install OEM fuel tank support (**L**) underneath fuel tank (**K**) and to side mount plates (**J**)

If there is fuel inside the tank (**M**), it may be too heavy to lift the support in place (with the fuel tank) and align holes manually, this may require lifting with blocking (**M1**) by a forklift.
- careful not to synch in the support strap



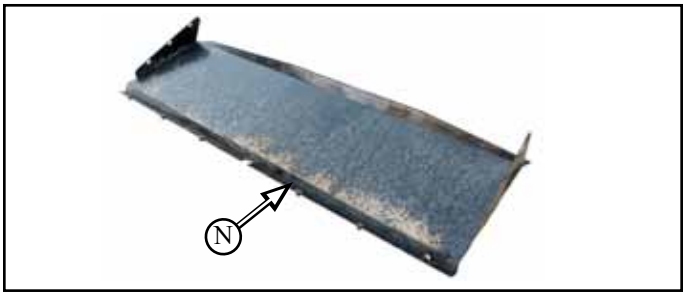
4.4.1.1 Secure in place with:
- M8 x 25 round head bolt and flange nut (**L1**) x4
- both sides

4.4.2 Remove support strap



4.5 Rear Upper Roof Panel Reinstallation

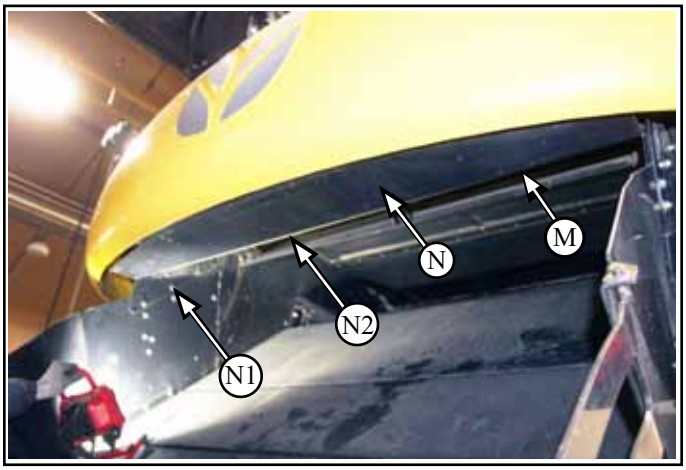
Parts List:
OEM Upper Roof Panel (**N**) - previously removed



4.5.1 Install upper roof panel (**N**) underneath fuel tank (**M**)

4.5.2 Attach to side mounting plates, with
- reuse existing hardware (**N1**) x3
- both sides

4.5.3 Attach to top panel, with
- reuse existing hardware (**N2**) x5

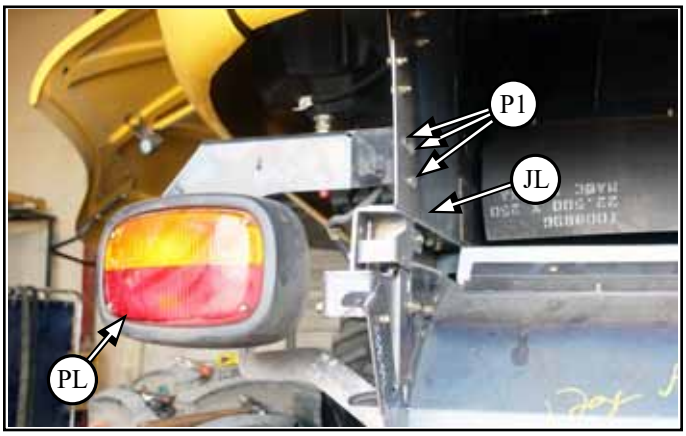


4.6 Signal Light Reinstallation

Parts List:
OEM signal lights (**PL** & **PR**) - previously removed

4.6.1 Install left signal light (**PL**) on to rear panel (**PL**), with:
- reuse existing hardware (**P1**) x3

4.6.2 Repeat for right side



4.7 Rotor Blade Clearance Inspection

4.7.1 Rotate Chopper Rotor Manually to ensure that there is clearance between All Blades and shields before running up the chopper.

- Adjust Rotor if there are clearance issues

Not doing so could cause catastrophic failure

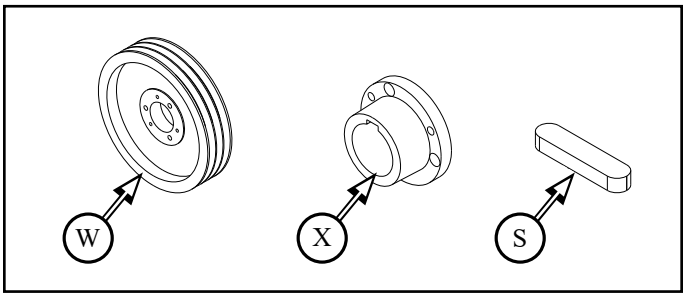
4.8 Chopper Drive Sheave Installation

If SCU is being installed, reference SCU installation manual for parts and procedure.

Without SCU installed:
- parts located in drive kit #101-055

Parts List:

RP781	Sheave 3B 11.0 pd SK (**W**)	Qty 1
RP291	Bushing 50mm SK (**X**)	Qty 1
323624	Key (**S**)	Qty 1

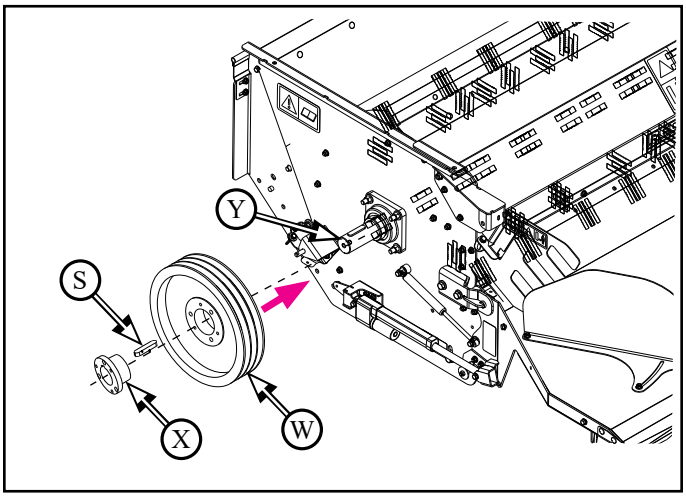


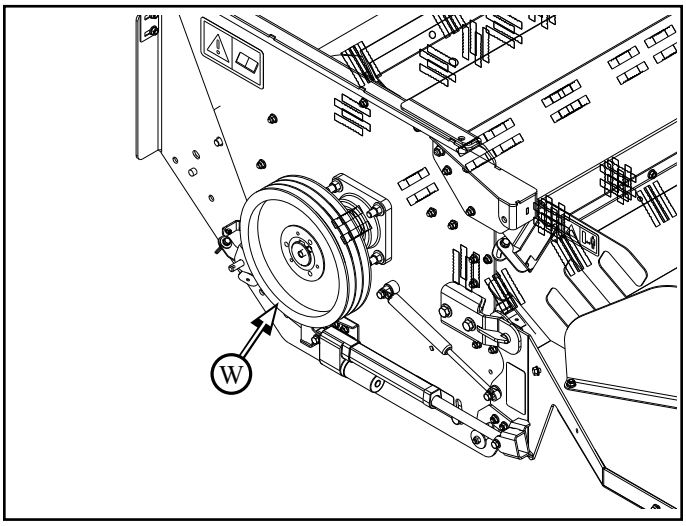
See **Appendix A** for bushing installation and removal

4.8.1 Slide bushing (**X**) onto chopper shaft (**Y**)
- ensure key (**S**) is in place

4.8.2 Install sheave (**W**) to bushing (**X**), with:
- supplied hardware

4.8.3 Ensure to align sheave with jackshaft sheave prior to installing drive belt



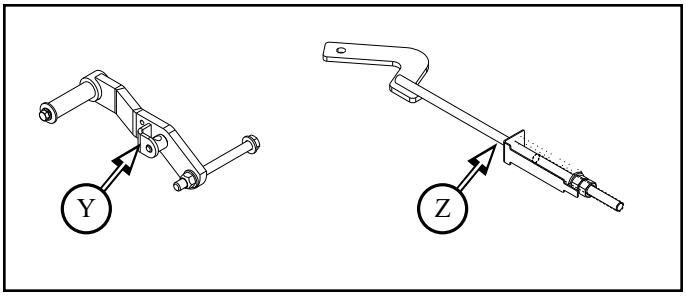


4.9 Replace Tension Rod Assembly
Procedure required only if SCU is NOT being installed

Without SCU installed:
- parts located in drive kit #101-055

Parts List:

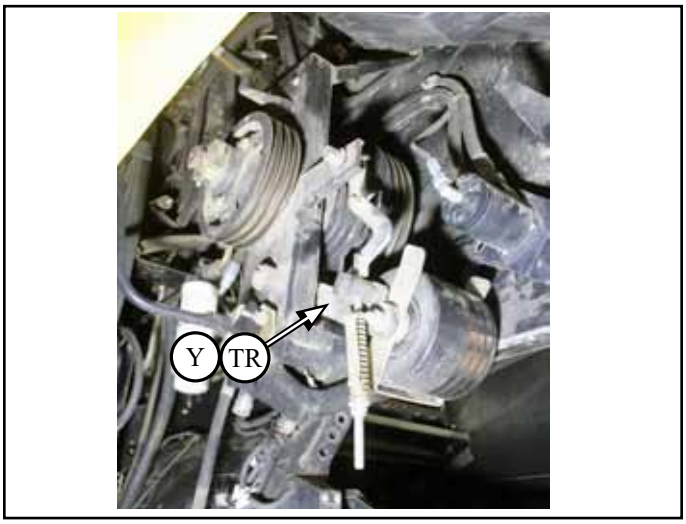
CH522BA	Idler Drive Assy (**Y**)	Qty 1
CS781ZA	Tension Rod Assy (**Z**)	Qty 1



4.9.1 Remove exisitng idler drive assembly (**TR**) from existing jackshaft
- not to be reused

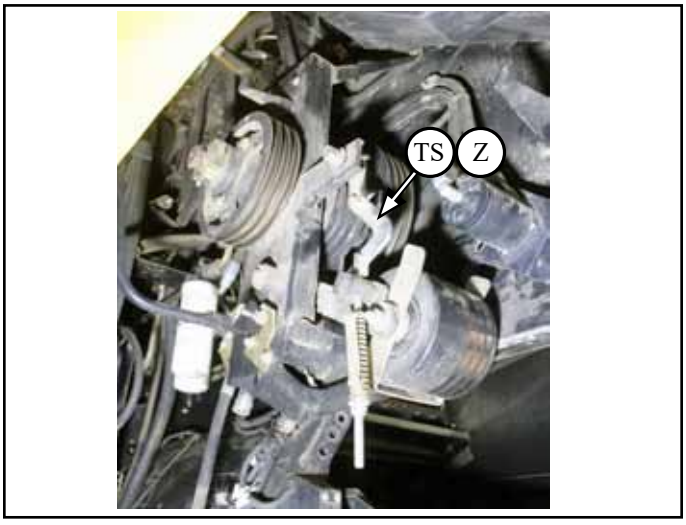
4.9.1.1 Remove components from existing idler drive assembly and install onto new idler drive assembly (**Y**) other than tension rod assembly (**TS**)

4.9.2 Install new idler drive assembly (**Y**) in place of old on jackshaft



4.9.3 Remove exisitng tension rod assembly (**TS**) from existing jackshaft
- not to be reused

4.9.4 Install new tension rod assembly (**Z**) in place of old

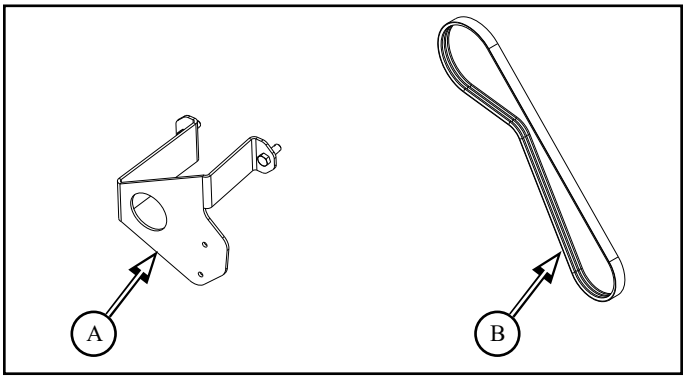


5 Chopper Drive Belt Modification

If SCU is being installed, reference SCU Installation manual for parts and procedure

Leave existing OEM jackshaft in place if SCU is NOT being installed

Without SCU Installed:
- parts located in drive kit #101-055



5.1 Replace Chopper Drive Belt

Parts List:

CH763B	Top Shield Mt Brkt (**A**)	Qty 1
BE3B122K	VBelt 3B x 122L (**B**)	Qty 1
- MY18 & Older (3500rpm chopper)		
BE3B124K	VBelt 3B x 124L (**B**)	Qty 1
- MY19 & Newer (4000rpm OEM chopper)		

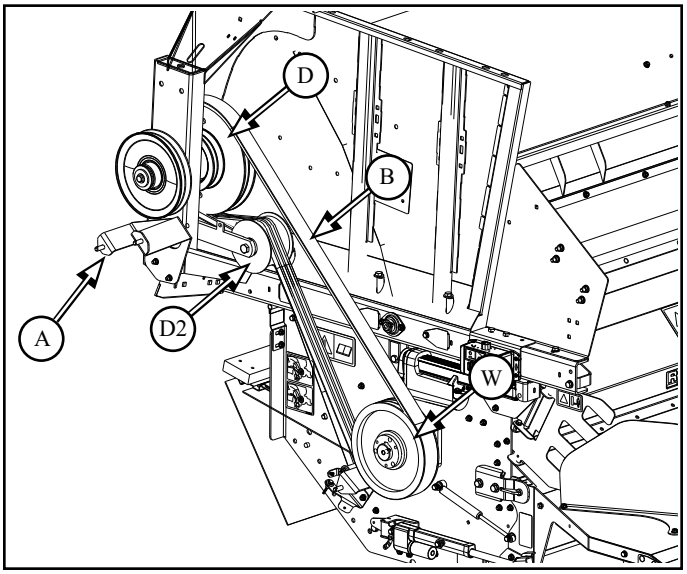
*** Note that the MAV Chopper will operate between 2950 and 3150 rpm**

5.1.1 Remove existing shield mount bracket (**E**)

5.1.2 Install top shield mount bracket (**A**) onto jackshaft in place of existing (**E**), with:
- reuse existing hardware

5.1.3 Replace existing drive belt with new drive belt (**B**)

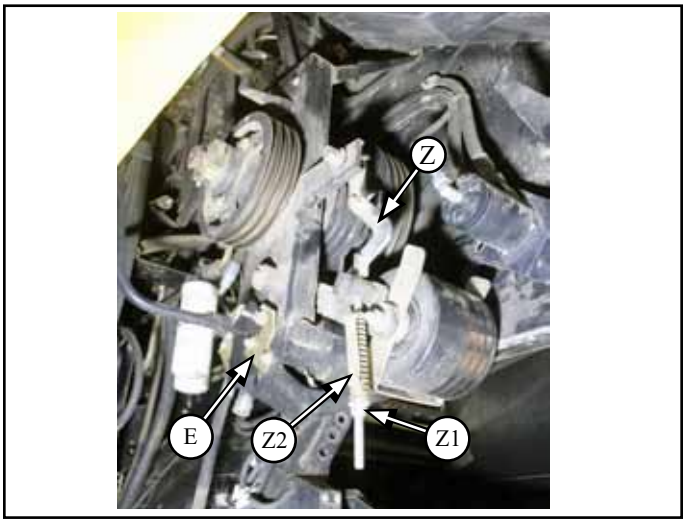
5.1.4 Install drive belt (**B**) onto the outer grooves of jackshaft sheave (**D**), route around idler (**D2**) and install onto chopper drive sheave (**W**)



5.1.5 Align Sheave
- Align the Chopper Drive Sheave (**W**) to the Jackshaft Outter Sheave **(D)**

- adjust idler wheel **(D2)** alignment if necessary
- Once the sheaves are aligned, tighten sheaves and mounting hardware

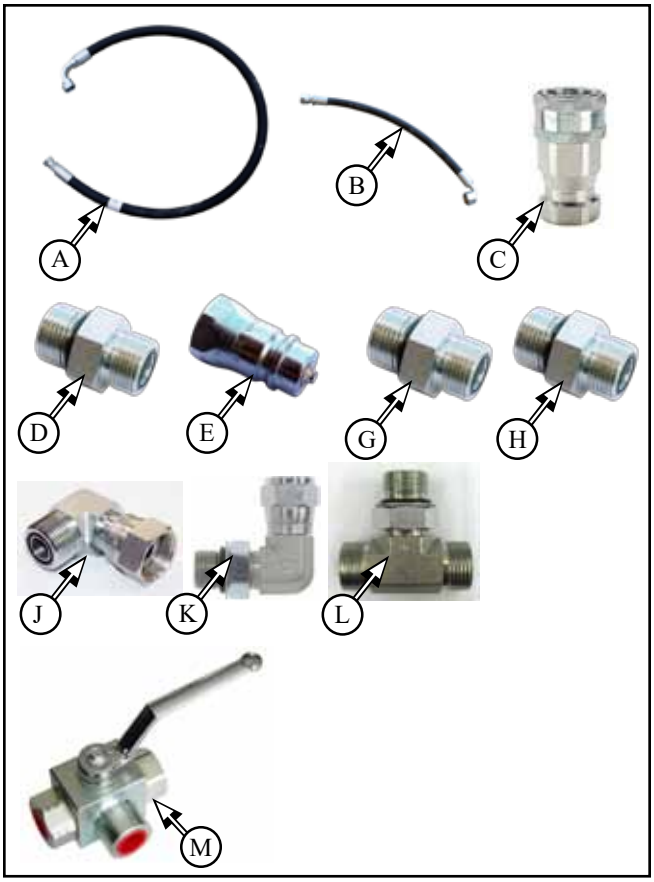
5.1.6 Adjust the tension on the belt (**B**) by adjusting the nut (**Z1**) on tension rod (**Z**) to tighten spring until it lines up with the spring indicator (**Z2**)



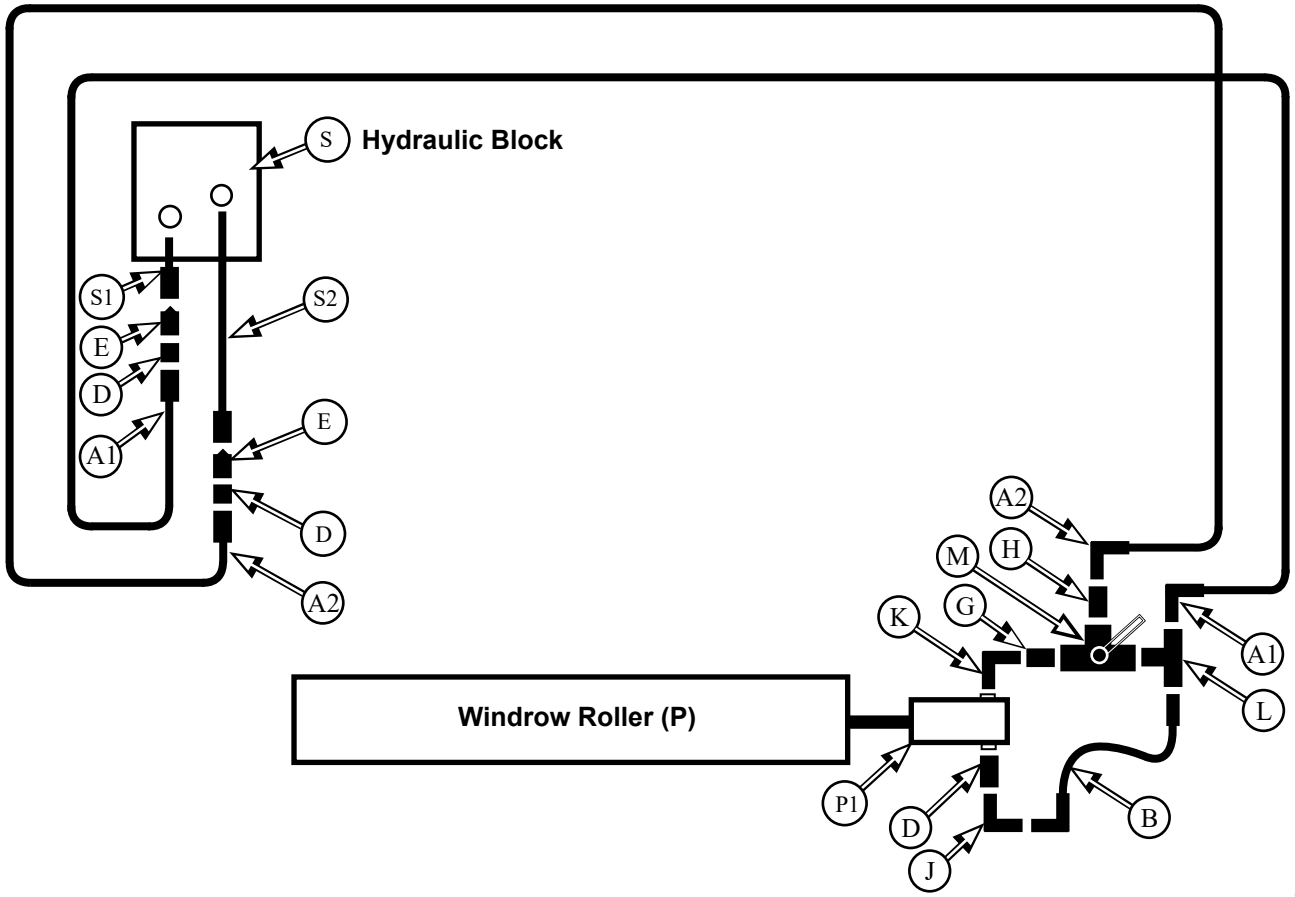
6 Windrow Hydraulics Installation

Parts List:

HH153	Hyd. Hose .5 x 210L (**A**)	Qty 2
HH152	Hyd. Hose .625 x 26L (**B**)	Qty 1
RP1334	Fit Hyd Coupling Female 10F ORB (**C**)	Qty 1
H25-1010MF	Fit Hyd Str 10 MORB - 10 MORFS (**D**)	Qty 3
RP1279	Fit Hyd Coupling Male 10F ORB (**E**)	Qty 2
H25-0810MF	Fit Hyd Str 8 MORB - 10 MORFS (**G**)	Qty 1
H25-0808MF	Fit Hyd Str 8 MORB - 8 MORFS (**H**)	Qty 1
H38-1010FFX	Fit Hyd 90 DEG 10 MORFS - 10 FORFX (**J**)	Qty 1
H35-1010FFX	Fit Hyd 90 DEG 10 MORB - 10 FORFS (**K**)	Qty 1
H40-0808MFS	Fit Hyd TEE 8 MORFS - MORFS - 8 MORB Branch (**L**)	Qty 1
RP176	Valve Hyd Ball 3Way .5FORB (**M**)	Qty 1

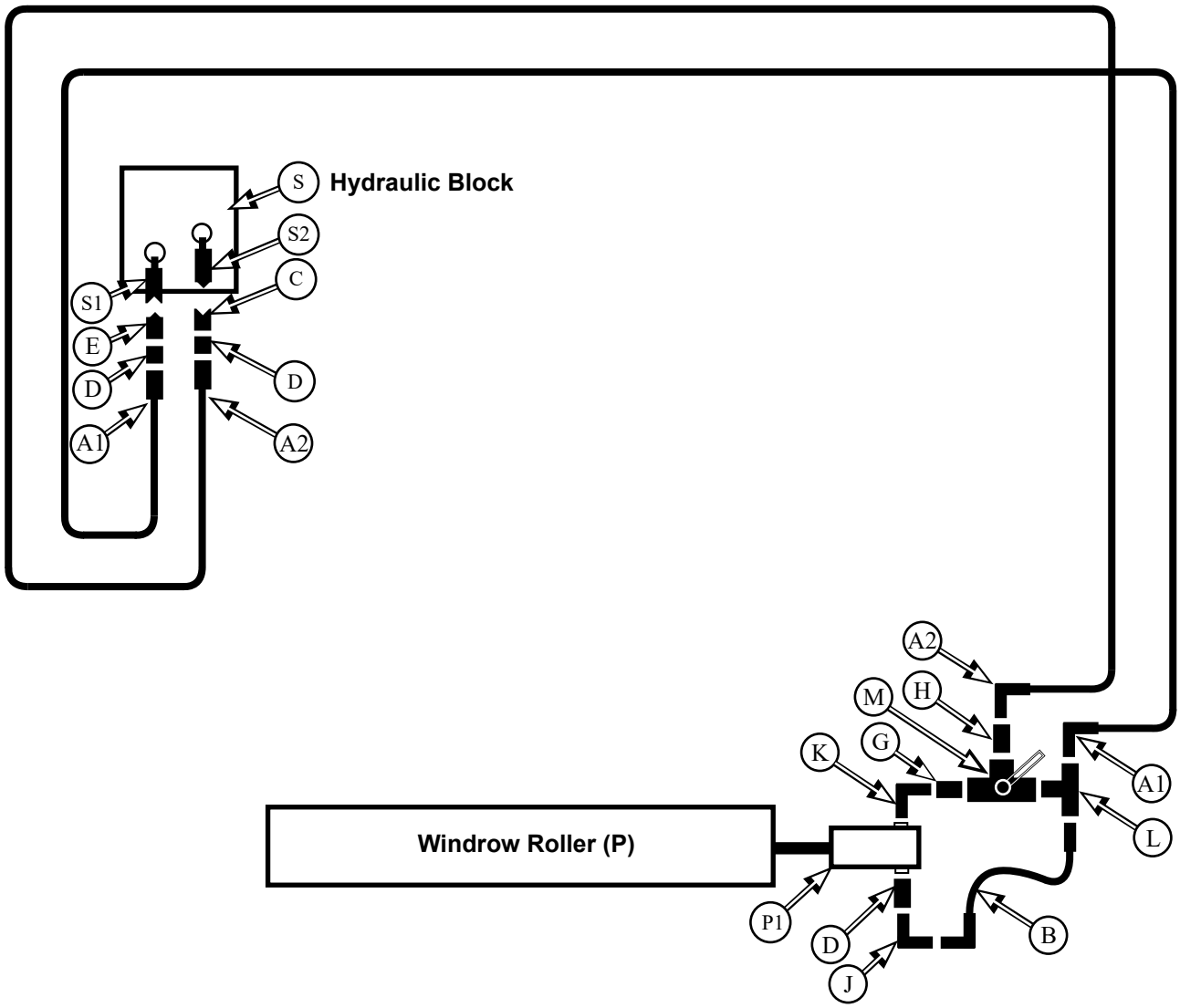


Windrow Hydraulics Schematic
Configuration 1



REDEKOP™

Windrow Hydraulics Schematic
Configuration 2

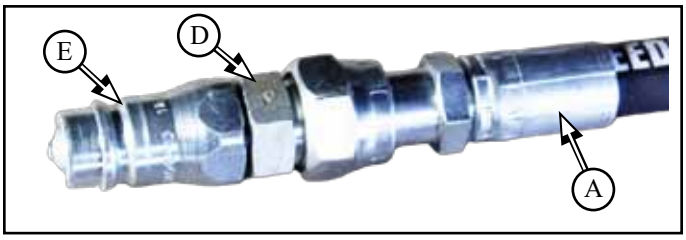


*** If installing conveyor, do not hook up lines to hydraulic block ***
Completion at conveyor installation

6.1 Hose Fitting Configurations

Configuration 1:

6.1.1 Attach fitting (**D**) to straight end on hyd hoses (**A**) x2



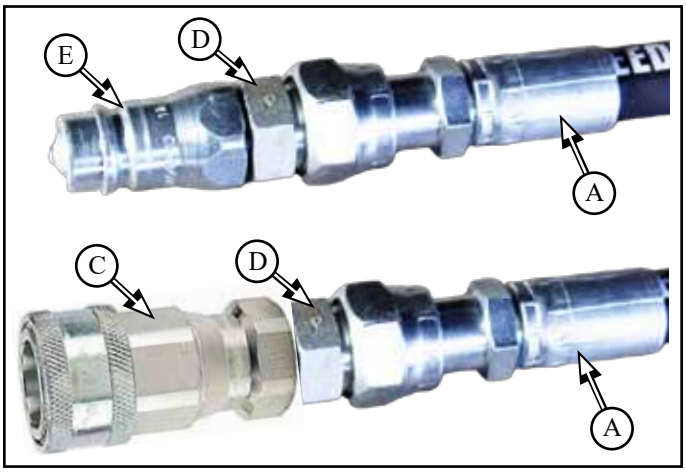
6.1.2 Attach quick connect fitting (**E**) to fitting (**D**) on hyd hoses (**A**) x2

Configuration 2:

6.1.3 Attach fitting (**D**) to straight end on hyd hoses (**A**) x2

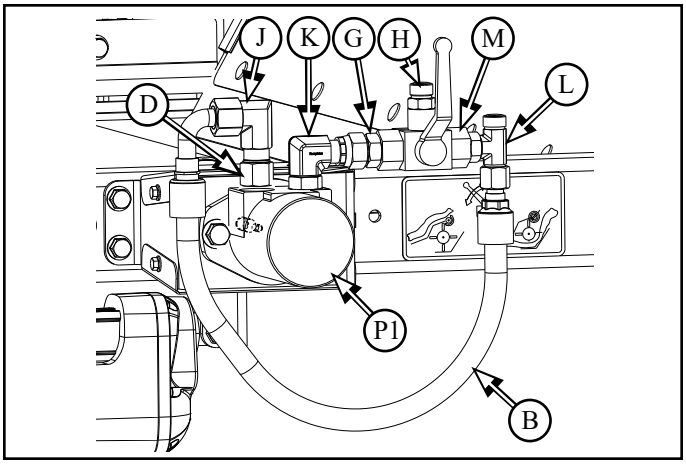
6.1.4 Attach male quick connect fitting (**E**) to fitting (**D**) on hyd hose (**A**) x1

6.1.5 Attach female quick connect fitting (**C**) to fitting (**D**) onto other hyd hose (**A**) x1



6.2 Windrow Hyd Motor Fitting Configuration

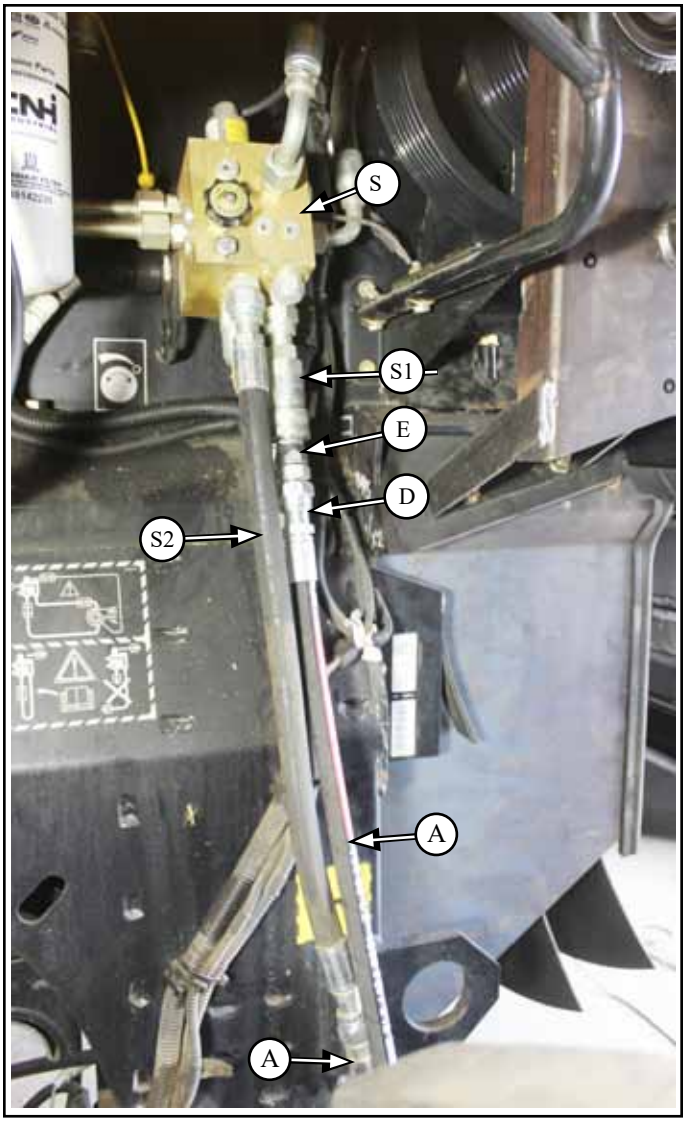
6.2.1 Install hydraulic fittings into windrow roller motor (**P1**)
- straight fitting (**D**) into port
- 90 degree fitting (**J**) into (**D**)
- 90 degree fitting (**K**) into port
- straight fitting (**G**) into (**K**)
- Ball Valve (**M**) into (**G**)
- straight fitting (**H**) into branch of ball valve (**M**)
- tee (**L**) into ball valve (**M**)
- hyd hose (**B**) into elbow (**J**) and tee (**L**)



6.3 Hose Routing Configuration

Configuration 1:

6.3.1 Connect first hyd hose (**A**) onto short hyd hose (**S1**) off of hydraulic block (**S**)
- leave disconnected if installing conveyor



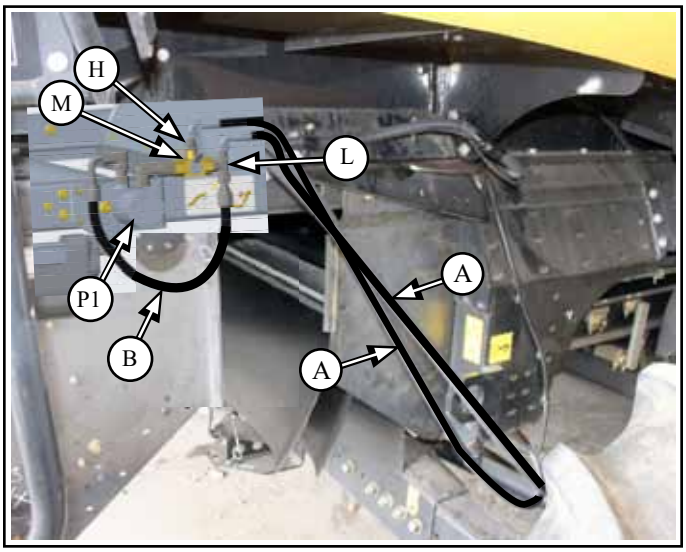
6.3.2 Connect second hyd hose (**A**) onto long hyd hose (**S2**) off of hydraulic block (**S**)

Configuration 2:

6.3.3 Connect hyd hoses (**A**) onto quick connect fittings (**S1 & S2**) on hydraulic block (**S**) - picture not shown

6.3.4 Run hydraulic hoses (**A**) underneath combine along front of rear axle to fittings (**H** & **L**) on windrow roller motor (**P1**)

6.3.5 Install hydraulic hoses (**A**) to fittings (**H** & **L**) on windrow roller motor (**P1**)



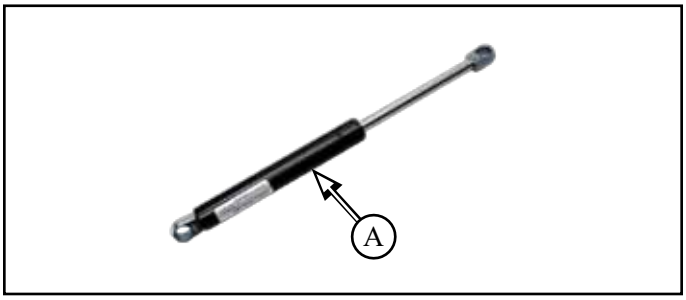
6.3.6 Secure hydraulic hoses in place with tube clamps and cable ties

6.3.7 Check rotation of windrow roller (**P**)
- run combine
- ensure top of roller is rotating “out” of combine
  - if rotating incorrectly, switch hoses on the hyd block (**S**)

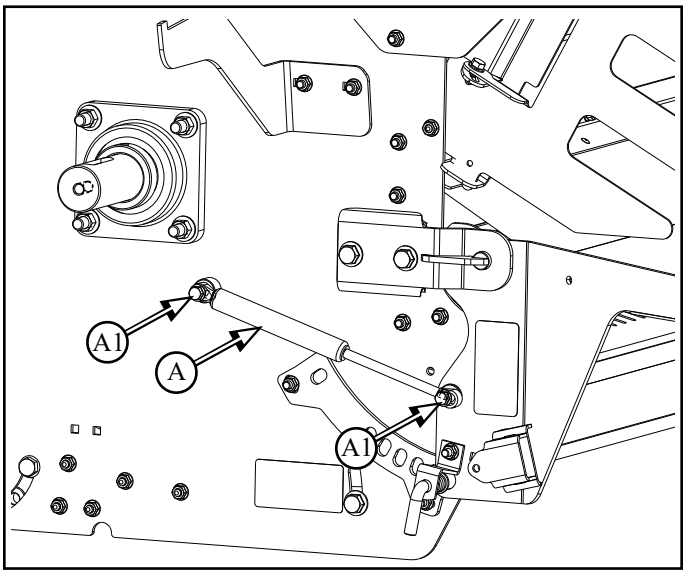
7 Tailboard

7.1 Gas Shock Installataion

Parts List:
RP951A Gas Spring (**A**) Qty 2



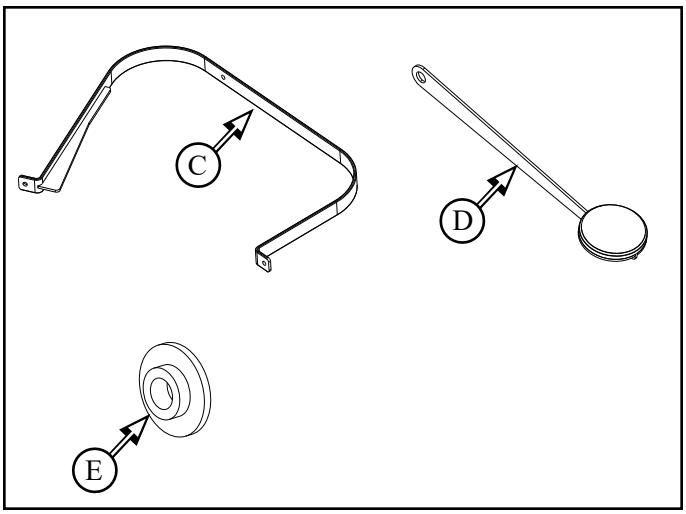
7.1.1 Install gas shock (**A**) on to chopper and tailboard studs, with:
- M8 x 20 flange bolt (**A1**) x2
- both sides



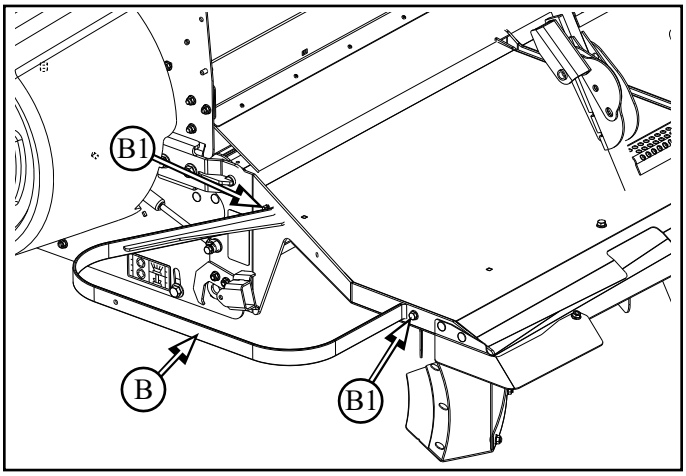
7.2 Tailboard Guard Installation

Parts List:

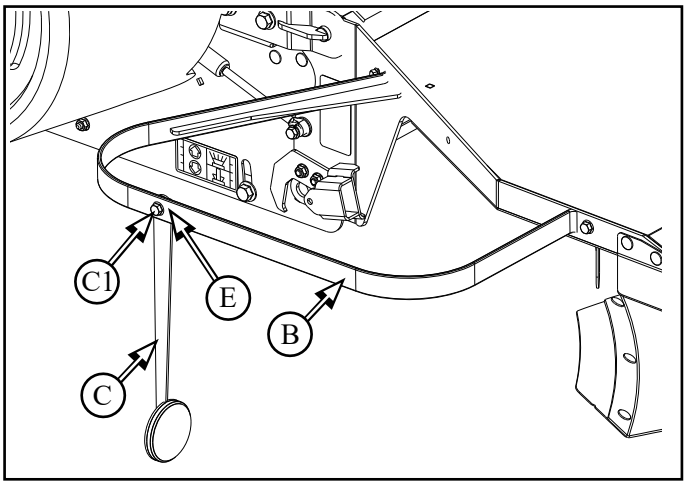
CS171B	Tailboard Guard (**C**)	Qty 2
CS990BA	Reflector Bracket (**D**)	Qty 2
CS991Z	Spacer Reflector (**E**)	Qty 2



7.2.1 Install tailboard guard (**B**) to side of tailboard, with:
- M8 x 20 flange bolt and flange nut (**B1**) x 2
- both sides



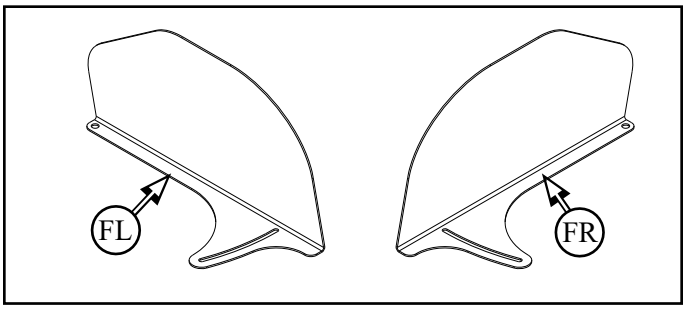
7.2.2 Install tailboard hanging bracket reflector (**C**) to tailboard guard (**B**), with:
- M8 x 25 flange bolt, spacer bushing (**E**) and flange nut (**C1**)
- both sides



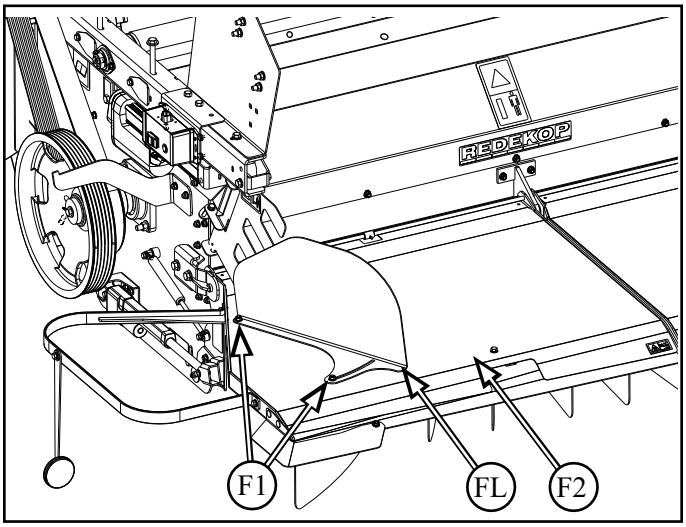
7.3 Windrow Fin Installation
- required for windrowing

Parts List:

CS1053BL	Windrow Fin Lt (**FL**)	Qty 1
CS1053BR	Windrow Fin Rt (**FR**)	Qty 1



7.3.1 Install windrow fin (**FL**) onto left tailboard cover panel (**F2**), with:
- M8 x 16 round head bolt and flange nut (**F1**) x2
- punch out knockout holes (**F1**) in panel (**F2**)
- repeat for other side

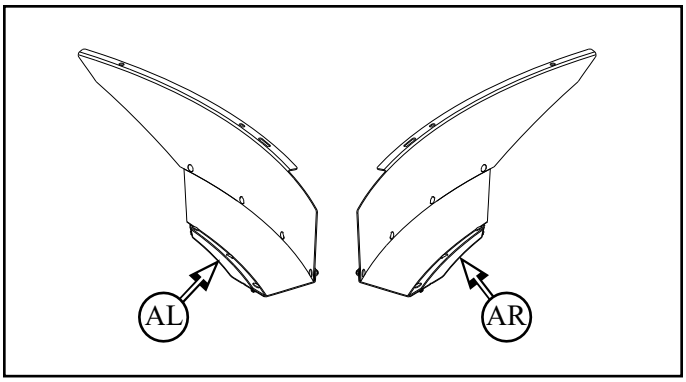


7.4 Wide Spread Scooped Fin Installation

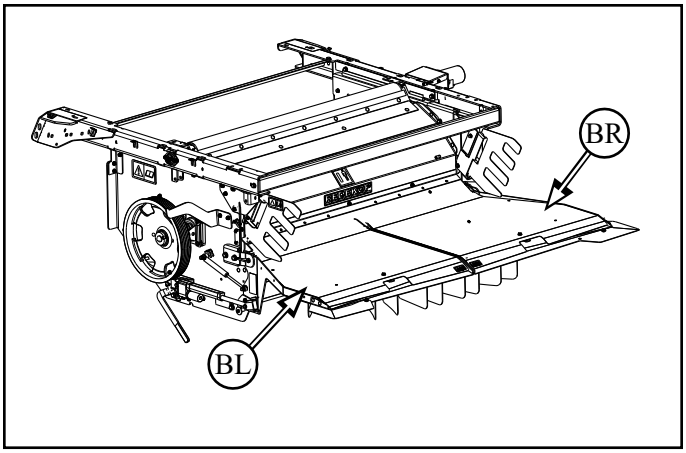
If a SCU is being installed, these fins are not required, refer to SCU installation manual for SCU fin installation

Parts List:
part included in CS1197BS box
hardware located in CS237S bag

CG237BAL	Wide Spread Scooped Fin Lt (**AL**)	Qty 1
CG237BAR	Wide Spread Scooped Fin Rt (**AR**)	Qty 1



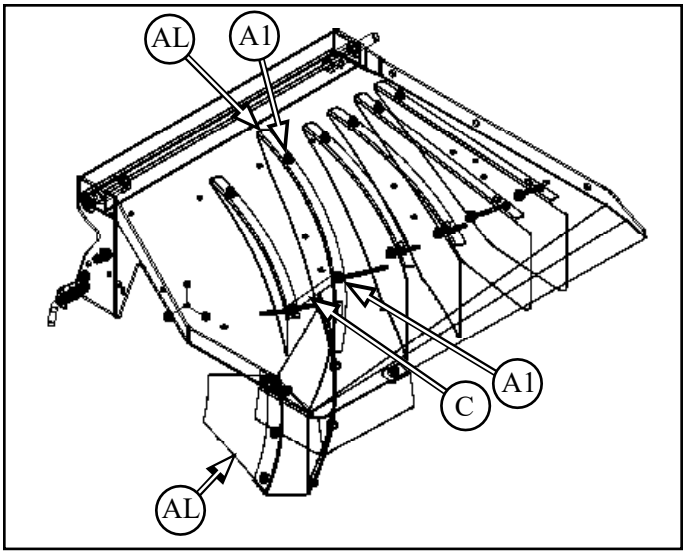
7.4.1 Remove tailboard top cover plates (**BL** & **BR**) - to be reinstalled



7.4.2 Install left wide spread scooped fin (**AL**) to underside of left tailboard, with:
- M8 x 16 round head bolt and flange nut (**A1**) x2

7.4.3 Attach connector link (**C**) to the scoop fin assembly (**AL**) and curved fin (**B**) on the top side of the tailboard

Note: For the scooped fin to work properly, the small fin must be set in position relative to the scooped fin with the connector link.



7.4.4 Repeat for right side

7.4.5 Reinstall top cover plates (**BL** & **BR**)

8 Electrical Installation

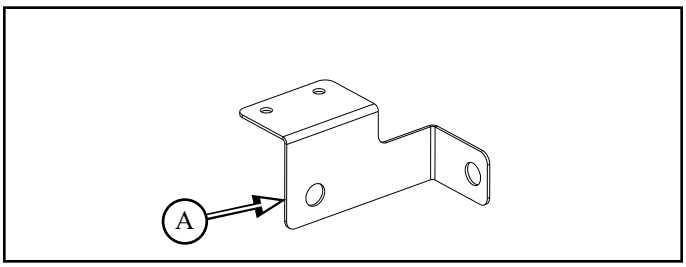
If SCU is being installed, reference SCU installation manual for parts and procedure

8.1 OEM Sensor Installation

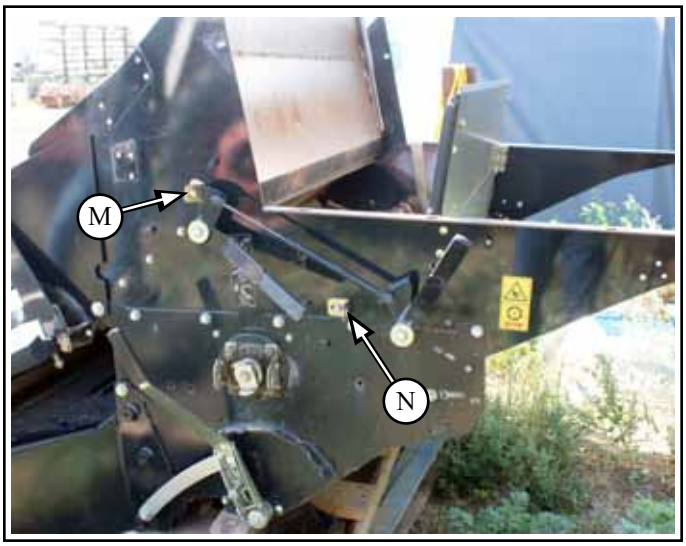
Note: Not required for machines with actuated chopper doors

Parts List:

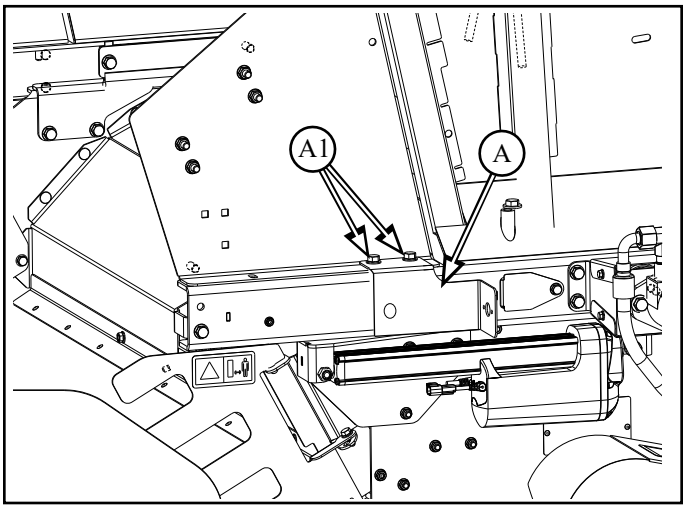
CH757B Sensor Mount Plate (**A**) Qty 1



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



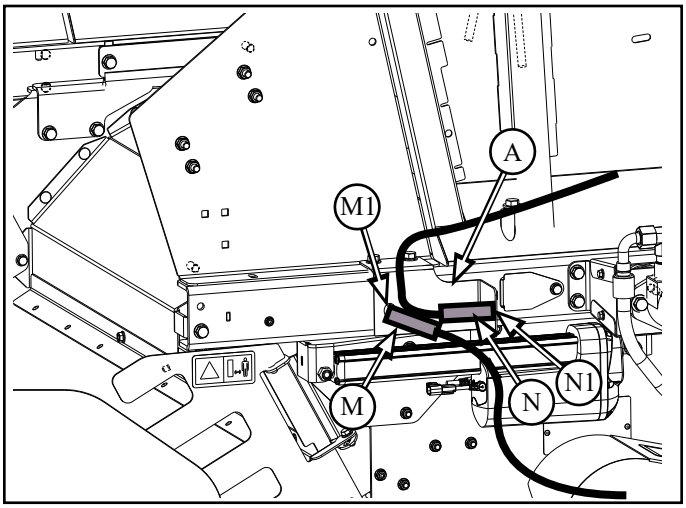
8.1.2 Install sensor mount plate (**A**) to right side of combine channel edge, with:
- reuse side plate mount hardware (**A1**) x2



8.1.3 Reinstall OEM sensors (**M** & **N**) from the OEM chopper to mount plate (**A**)

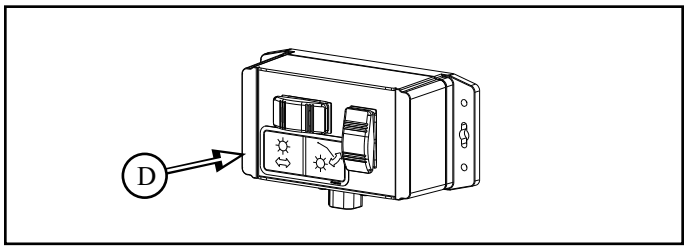
8.1.4 Install swath plate sensor (**M**) into hole (**M1**) on mount plate (**A**)
- pointing to steel
- reuse existing mounting hardware

8.1.5 Install chopper door sensor (**N**) into hole (**N1**) on bent edge of mount plate (**A**)
- pointing to “empty space”
- reuse existing mounting hardware

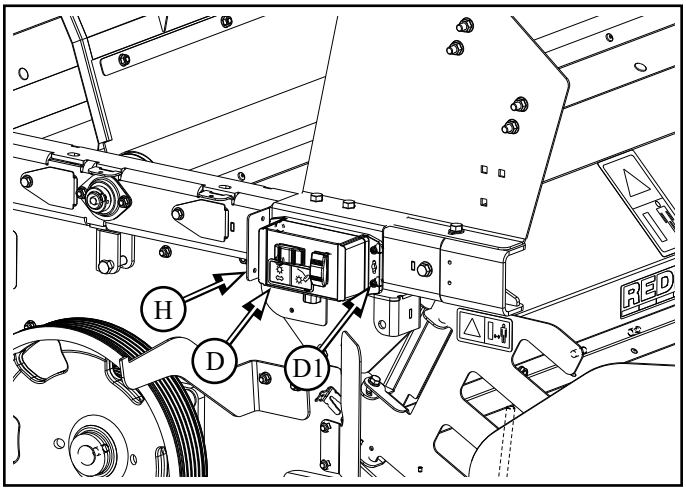


8.2 Switch Box Installation

Parts List:
RP1282A Switch Box Assy (**D**) Qty 1



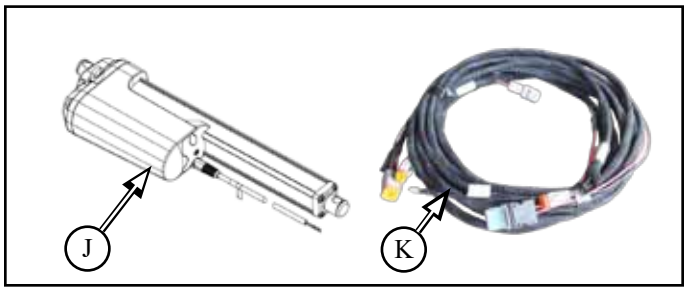
8.2.1 Install switch box (**D**) to mounting plate (**H**), with:
- #8-32 x .75 machine screw, flat washer x8 (on head and nut side) and locknut (**D1**) x4



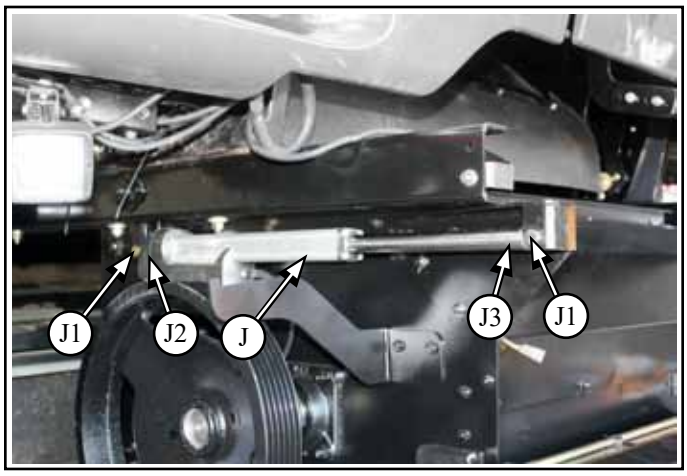
8.3 Chopper Acutator Installation

Parts List:

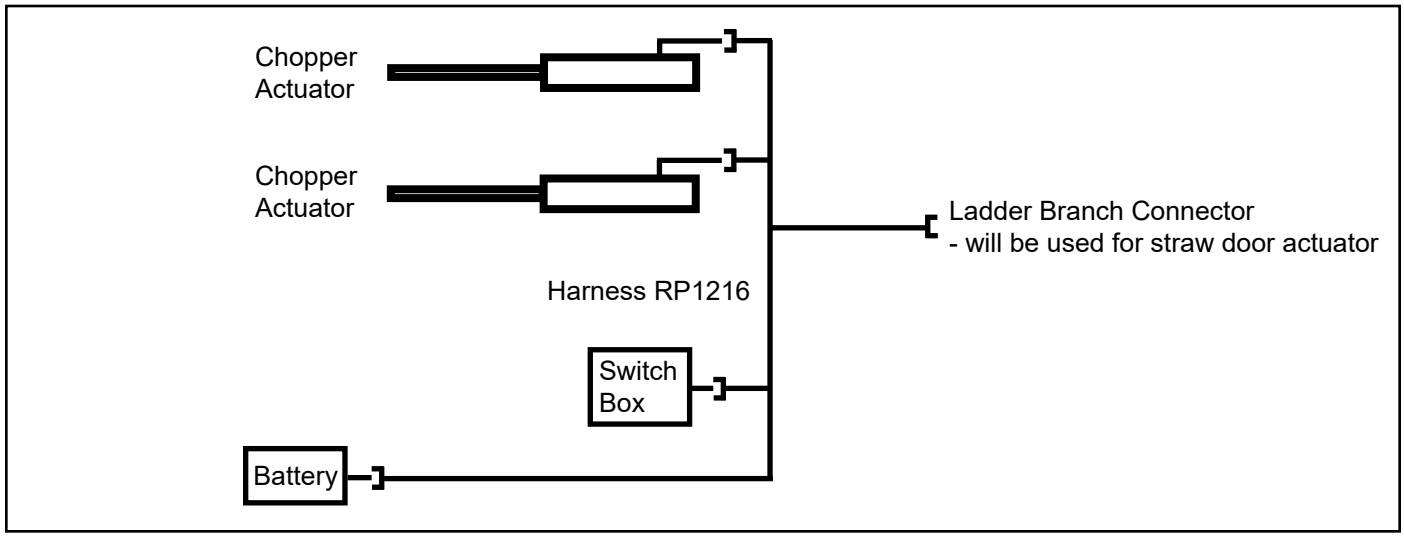
RP827	Actuator (**J**)	Qty 2
RP1216	Harness Slide Actuator (**K**)	Qty 1



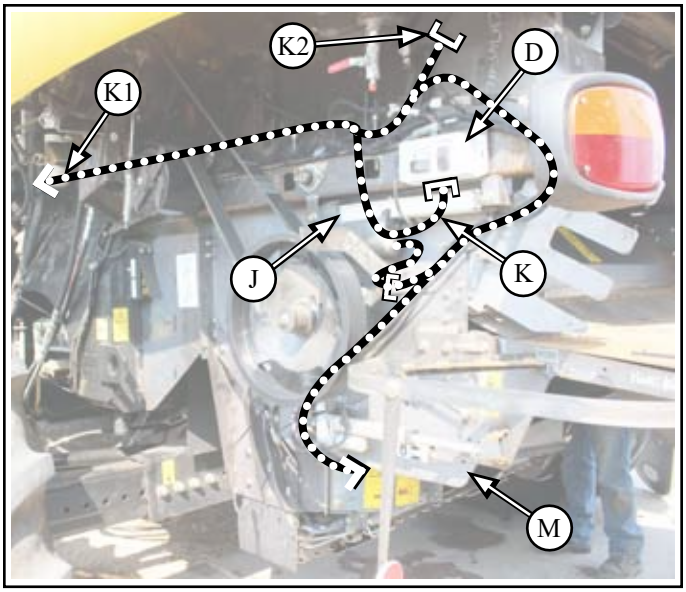
8.3.1 Install actuator (**J**) to chopper interface and chopper, with:
- M12 x 60 flange head bolt and flange nut (**J1**) x2
- ensure base of actuator (**J2**) is mounted on the interface and head/rod (**J3**) is mounted on the chopper
- both sides



8.3.2 Install Chopper Actuator Harness (**K**)
- connect harness (**K**) to bottom of switch box (**D**)
- route harness as shown from switch box (**D**) to left chopper actuator (**J**)
- continue routing harness below chopper (**M**) to right chopper actuator (**J**)
- route “power lines” (**K1**) along left side of combine to the battery
- branch (**K2**) for ladder will be used for straw door actuator
- use cable tie straps to secure harness to switch box bracket, existing brackets, harness or hydraulic lines running along side of combine



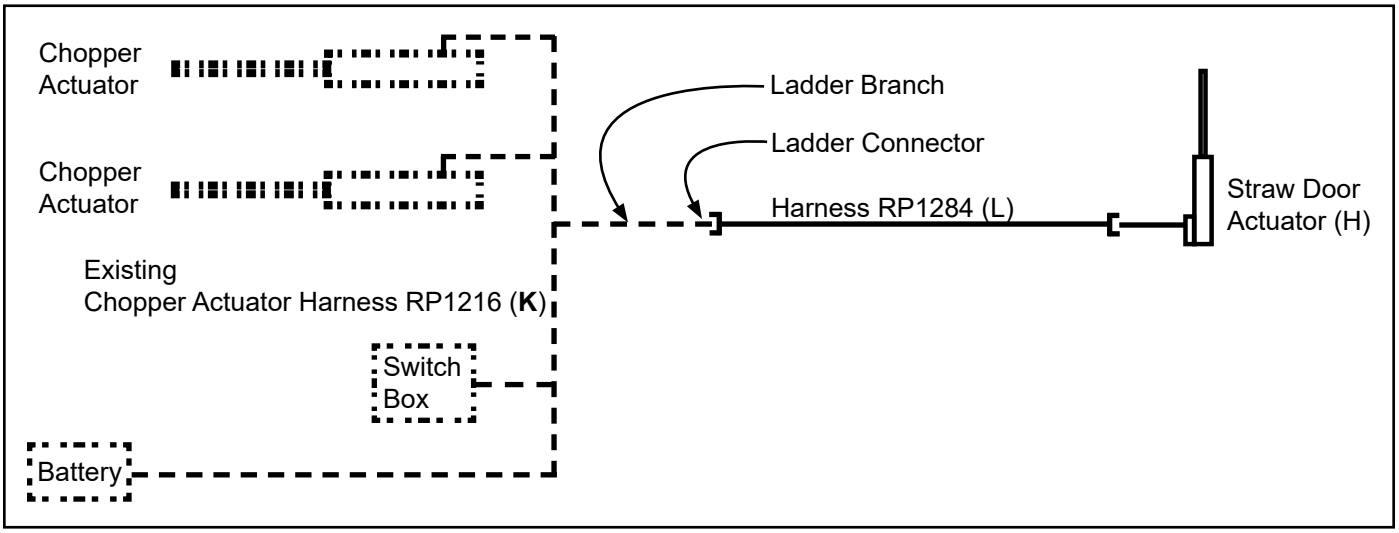
8.3.2.1 Route lines as shown

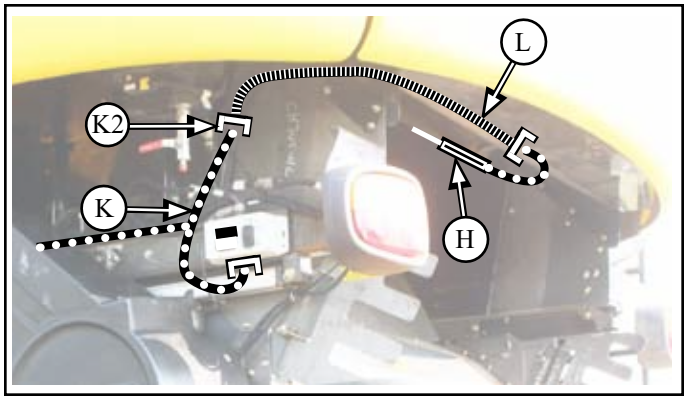


8.4 Straw Door Actuator Harness Installation

Parts List:
RP1284 Harness Extension (**L**) Qty 1

8.4.1 Install Straw Door Actuator Harness (**L**)
- connect harness (**L**) to ladder branch connector (**K2**) on chopper actuator harness (**K**)
- connect harness (**L**) to straw straw door actuator (**H**)
- route harness (**L**) as shown up to straw door actuator (**H**)
- use cable tie straps to secure harness to existing brackets or holes in panels

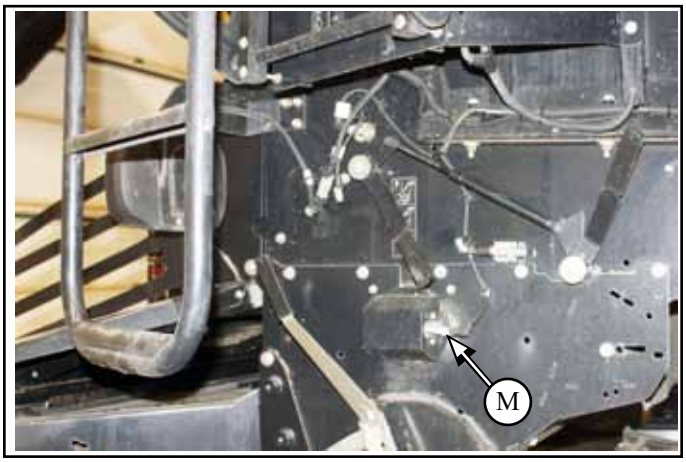




8.5 OEM Chopper/PSD Speed Sensor Installation

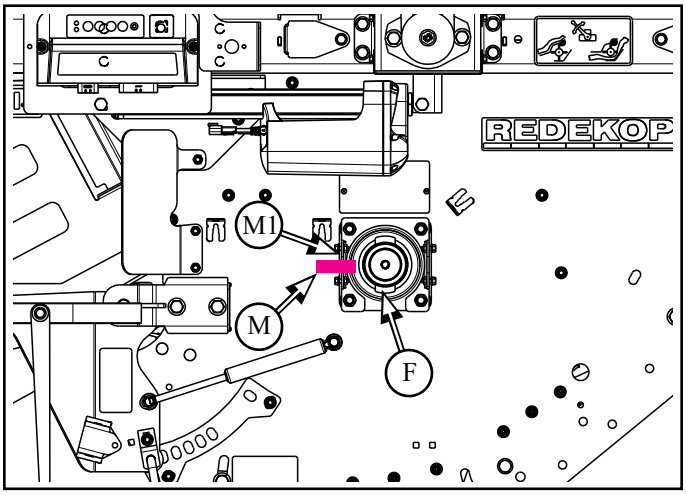
Parts List:
RP1389 Harness Speed Sensor PSD CR (**S**) Qty 1

8.5.1 Remove OEM speed sensor (**M**) from OEM chopper



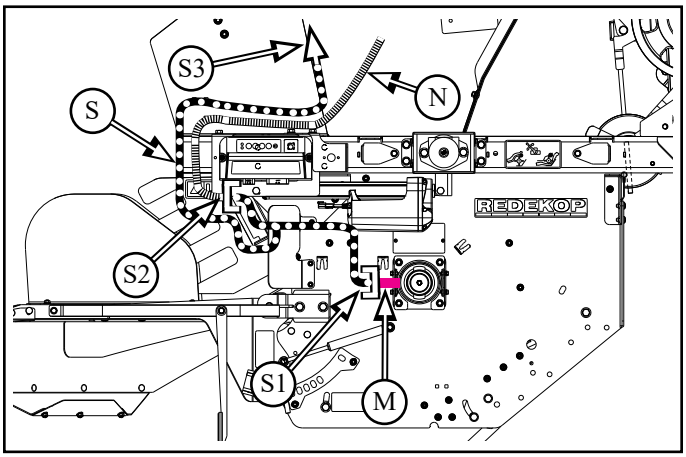
8.5.1 Install OEM speed sensor (**M**) onto mount plate (**M1**) on right side of chopper

8.5.2 Adjust sensor (**M**) to be 2-4mm from target (**F**)



8.5.3 Install chopper/PSD speed sensor harness (**S**) and make the following connections:
- connector (**S1**) into OEM speed sensor (**M**)
- connector (**S2**) into OEM chopper harness (**N**)
- connector (**S3**) into PSD speed sensor harness on left side of combine near jackshaft
  - route under fuel tank supports

This is to satisfy the PSD circuit speed sensor requirement as the PSD circuit now drives the windrow roller.



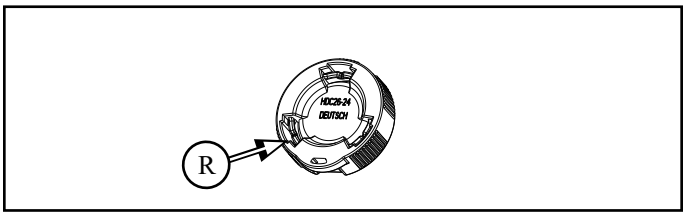
8.5.4 Use cable tie straps to secure harness to existing harness or hydraulic lines

8.5.4.1 Ensure harness is not in a pinch point and has enough free length for chopper movement

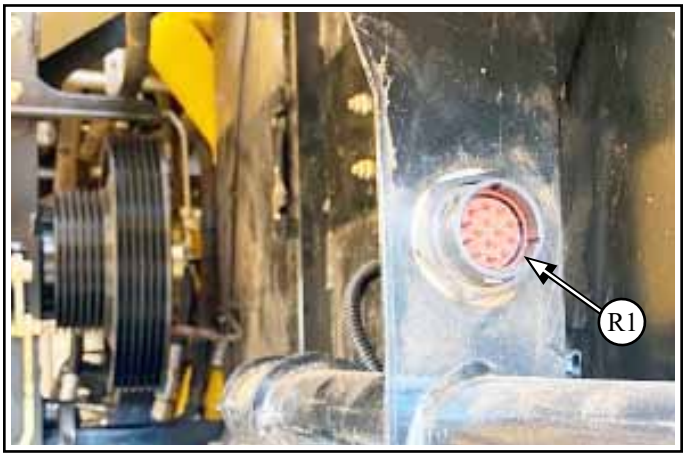
8.6 Opti Spread Plug Cover Installation

Parts List:

RP1329 Dust Cap (**R**) Qty 1



8.6.1 Install Opti Spread plug cover (**R**) onto exposed opti spread harness plug (**R1**)



9 Drive Shield Installation

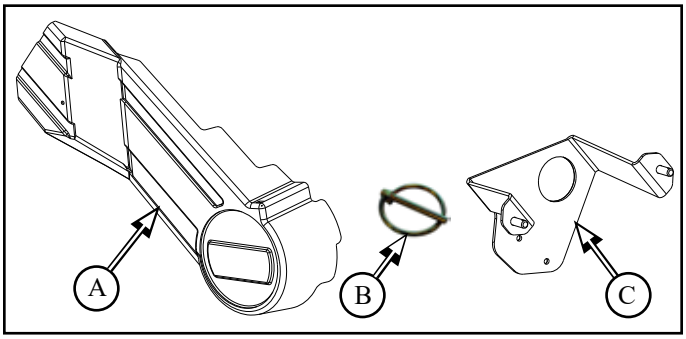
If SCU is being installed, reference SCU installation manual for parts and procedure

Without SCU Installed:

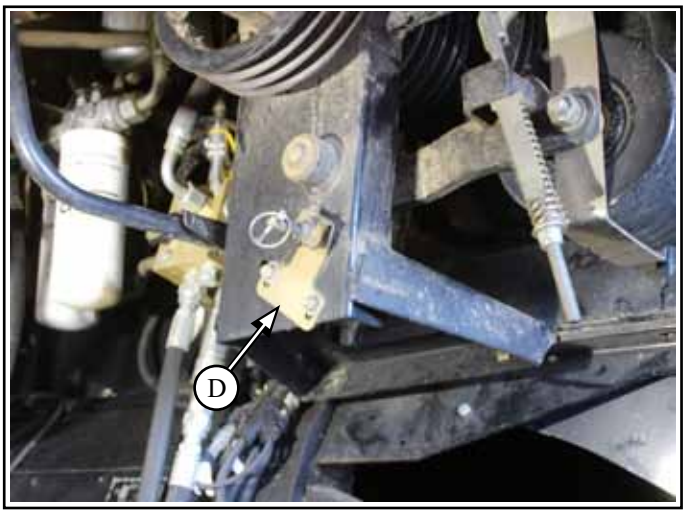
9.1 Drive Shield Installation

Parts List:

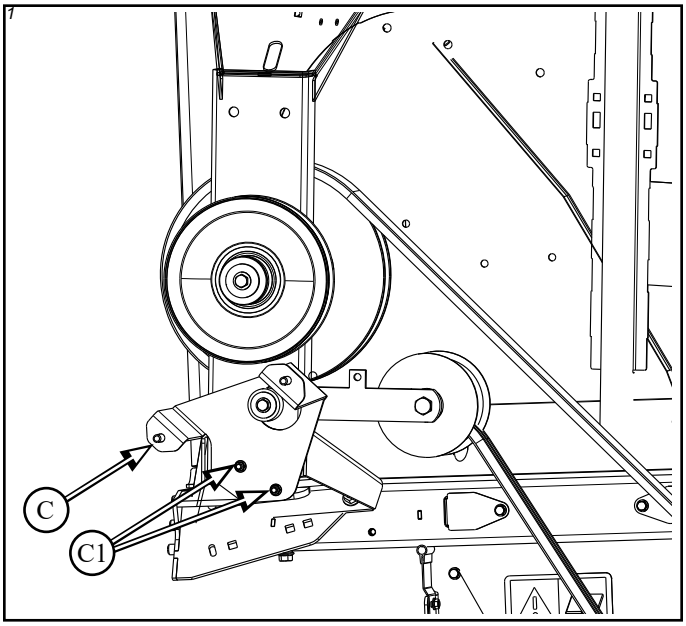
RP1281 Drive Shield CR **(A)**	Qty 1
RP1105 Lynch Pin (**B**)	Qty 3
CH763B Top Shield Mount Bracket (**C**)	Qty 1



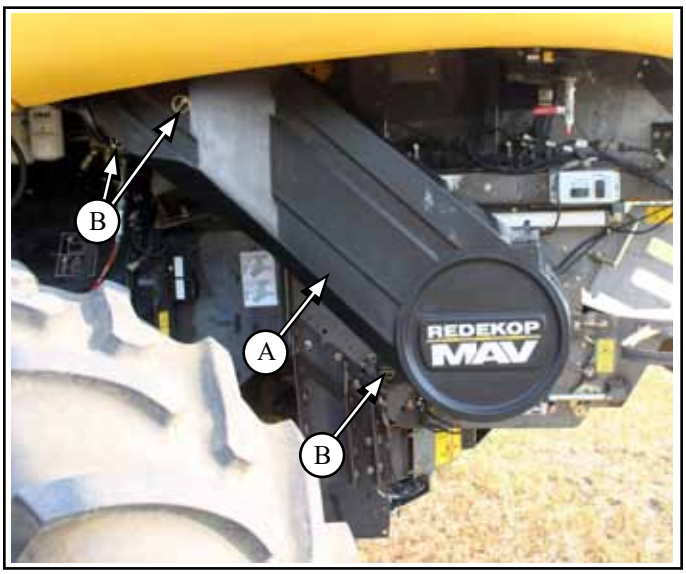
9.1.1 Remove existing shield mount bracket (**D**) from OEM jackshaft
- not to be reused



9.1.2 Install new shield mount bracket (**C**) in place of old on jackshaft, with:
- M8 x 25 round head bolt and flange nut (**C1**) x2



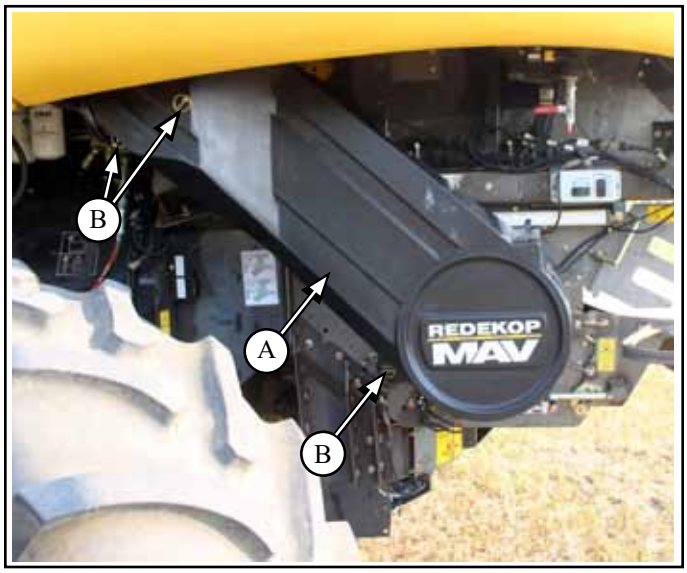
9.1.3 Install drive shield (**A**) over pins on mounting brackets
- secure in place with lynch pin (**B**) x3



10 Access to Sieves

10.1 Access to Sieves

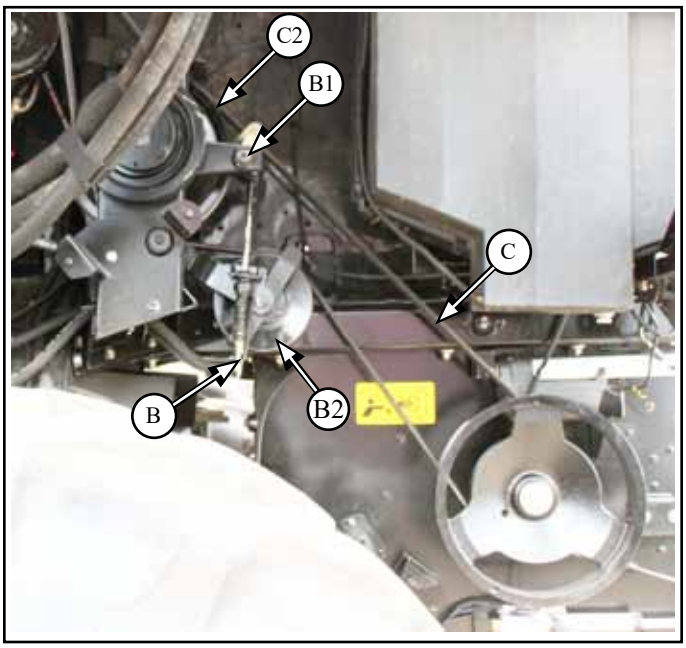
10.1.1 Remove drive belt shield (**A**)
- remove pins (**B**) x3



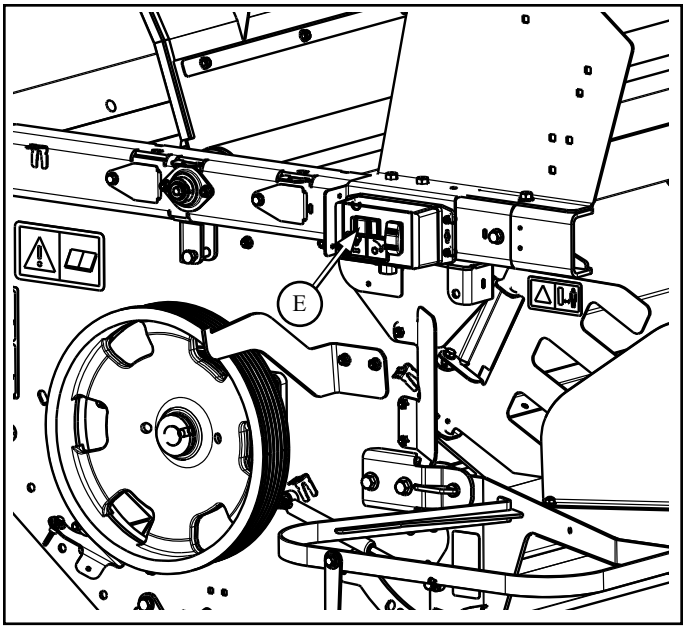
10.1.2 Disengage idler tension arm (**B**)
- rotate pin (**B1**) to drop belt tensioner (**B2**)

10.1.3 Move belt (**C**) off of bottom sheave (**C1**)

10.1.4 Move belt (**C**) off of top inner Jackshaft sheave (**C2**)



10.2 Toggle switch (**E**) to activate actuators until chopper has moved all the way back



Do Not Operate Straw Chopper Fore and Aft Switch without removing Shields and Belt first. Damage will occur!

11 Software Configuration

11.1 Do NOT deactivate STRAW SPREADERS in RESIDUE section of software
- hydraulic line is now used for windrow roller and controlled by ball valve

11.2 Software Update

11.2.1 Update Software for:
Machines with an Opti-Spread system with PSD installed and use an electronic actuator for the chop-to-drop system.

11.2.2 Techician to use Electronic Service Tool (EST))
Configuration settings found:
- configurations -> machine configs

11.2.3 Set configuration to:

Configuration Name	Value
Opti-Fan	Not Installed
Residue System	Manual
Chopper	Straw Hood Chopper
Swath Door Configuration	Not Installed
Spreader Service Position Sensor	Not Installed
Straw Hood	PSD Installed
Spreader System	Not Installed

11.2.4 Windrow door position is now controlled using supplied external control interface

12 Appendix A

12.1 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

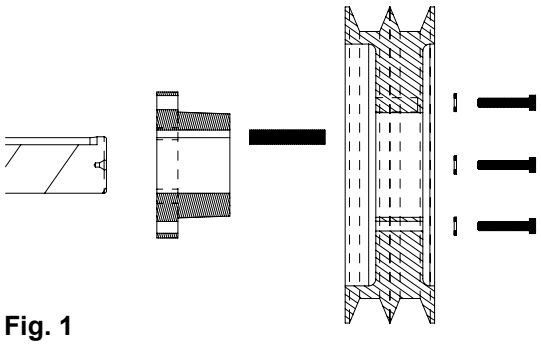


Fig. 1

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

Ensure that the Hydraulic Fittings have been tightened

CAUTION

CHECK HYDRAULIC FITTINGS FOR LEAKS

CAUTION

DO NOT RUN THE COMBINE WITHOUT HYDRAULIC OIL

WARNING

HYDRAULIC LINES MAY BE UNDER PRESSURE

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.

CAUTION

Wear Hearing Protection during operation

CAUTION

Check all fasteners to ensure they have been properly tightened

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.

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

Check all fasteners to ensure they have been properly tightened

CAUTION

Check that all tools and loose fasteners have been removed from inside of combine and chopper

WARRANTY CARD

Please send this warranty card in to Redkop Manufacturing
Fill in when the Straw Chopper has been fully installed and the following items have been checked

Email to: warranty@redekopmfg.com
or
Fax to: +1-306-933-1088

Selling Dealer Name and Location: _____

Customer Name: _____

Address: _____

_____

_____

Country: _____

Telephone #: _____

Email: _____

Combine Model: _____ **Hour Meter Reading:** _____

Combine Serial #: _____

Jackshaft Serial #: _____

Date Strawchopper Installed: _____

Strawchopper Installed by: _____ **Print:** _____

Belt Tensioners set to spring indicator: _____

Strawchopper Rotor has been rotated manually to ensure clearances: _____

Strawchopper Blades clear with the knifebar: _____

Fan Blades clear rotating through the shroud: _____

Software has been updated: _____

Combine has been run with the threshing module in low speed and then progressed to full power when everything is running smoothly at lower speeds? _____

Are there any knocking noises? _____

Comments: _____

_____

REDEKOP MANUFACTURING

1.866.REDEKOP (1.866.733.3567)

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info@redekopmfg.com
www.redekopmfg.com

For additional and the most up to date Manuals:

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