REDEKOP™

SEED CONTROL UNIT
CLAAS

OPERATOR'S MANUAL

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

SC001-04_R2

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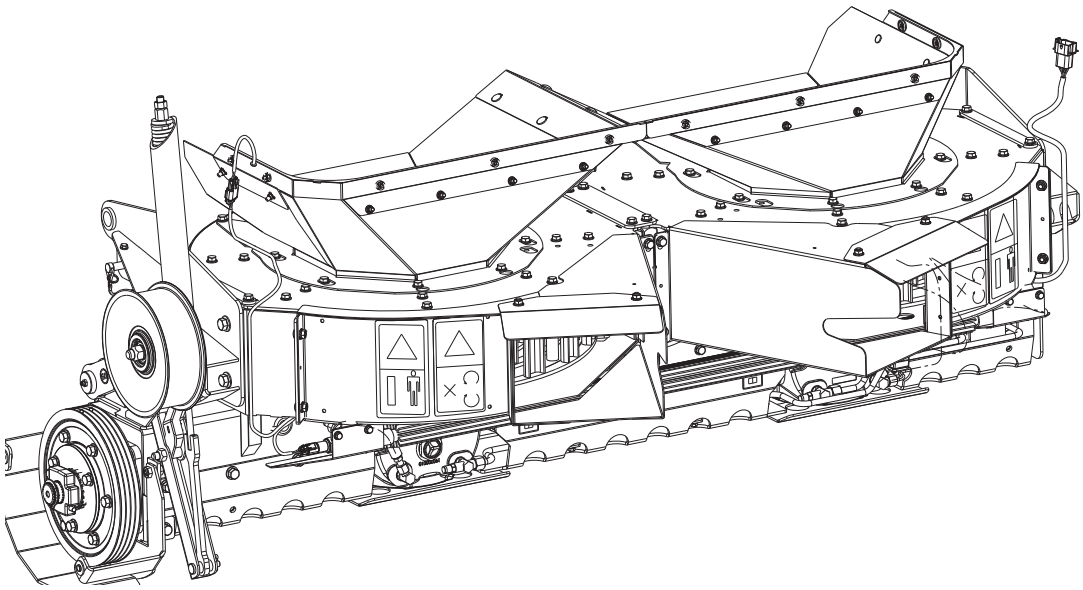

Seed Control Unit
Operator's Manual Claas

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Read and Understand This Manual Before Operating This Machine

- Learn how to operate and service the machine correctly. Failure to do so could result in personal injury or equipment damage. Redekop will not accept any responsibility for any damage or malfunctions resulting from failure to comply with the operator's manual.

- This manual provides descriptions of as well as operating and maintenance instructions. This may include accessories or optional equipment not included on your machine. This is to be kept in mind when reading this manual.

- If you do not understand the information in this manual, or if you have questions, contact Redekop Customer Service.

- This manual should be considered a permanent part of your machine and should remain with the machine when you sell it.

- Right-Hand and Left-Hand sides are determined by facing the direction of travel

- Redekop reserves the right to alter illustrations and technical data contained in this manual.

- The contents of this manual are intellectual property of Redekop. All use and/or reproduction not specifically authorized by Redekop is prohibited.

- All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. Redekop reserves the right to make changes at any time without notice.

- This manual should be considered a permanent part of your Seed Control Unit and should remain with the machine when you sell it.

ATTENTION!
Low Battery or alternator voltage can cause system errors

0 Safety

0.1 Instructions

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

This instruction manual explains the proper procedure for operating the Redekop Seed Control Unit.

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 operator's 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.

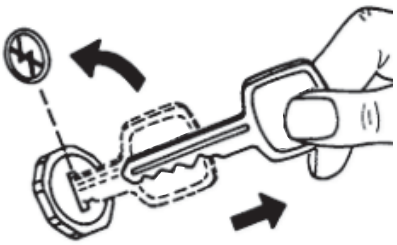
Never leave combine unattended as long as engine is running.

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. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

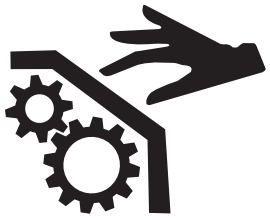
Keep hands, feet and clothing away from power-driven parts. Tie long hair behind your head. Do not wear rings, jewelry, a necklace, a necktie, scarf, or loose clothing when you work near machine or moving parts. If these items were to get caught, severe injury could result.

Securely support any Seed Control Unit 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.

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

0.12 Avoid High-Pressure Fluids

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

Replace worn or damaged hose assemblies immediately.

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

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

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

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

0.13 Dispose of Waste Properly

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

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

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

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

0.14 Use Proper Lifting Equipment

0.14.1 Lifting heavy components incorrectly can cause severe injury or 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!

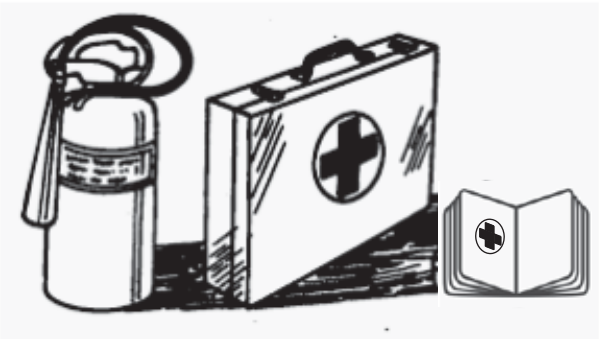
Interference with speech communication, acoustic signals is possible.

0.17 Prepare for Emergencies

0.17.1 Be prepared if a fire starts.

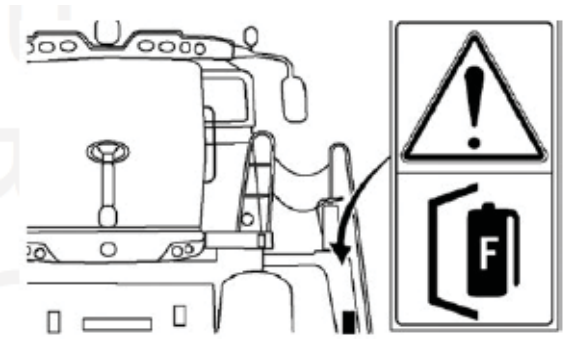
Keep a first aid kit and fire extinguisher handy.

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, and near moving parts is a fire hazard. Check and clean these areas frequently.

0.20 In the Event of Fire

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

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

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

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

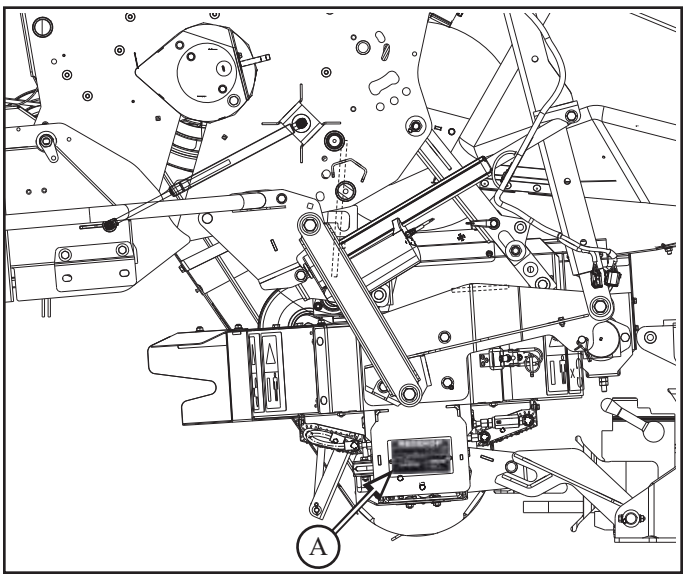
Grease Every 12 Hours
RP1091

Grease Every 50 Hours
RP1092

Oil - use SAE 75W90 GL5 Synthetic
RP1093

0.23 Serial Number

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



1 GENERAL INFORMATION

1.1 General Information on the components of the Seed Control Unit (SCU)

The Seed Control Unit system may consist of the following components:

Redekop Seed Control Unit (**A**)
Damages the weed seeds to prevent them from germinating

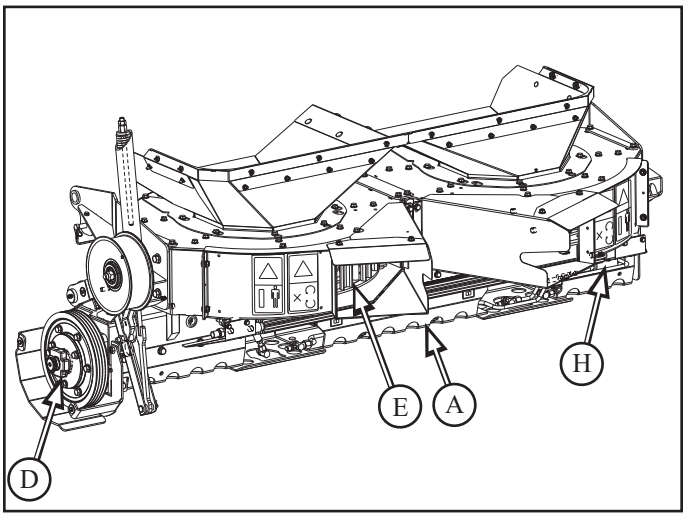
Chaff Pan Extension (**C**)
Directs chaff from combine sieves into SCU (**A**)

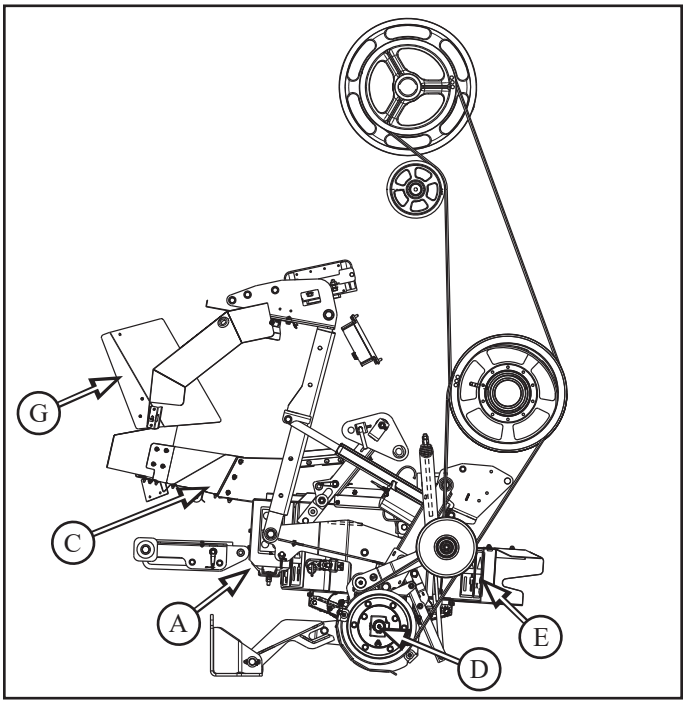
Drive Coupling (**D**)
Allows quick engagement or disengagement of SCU drive system

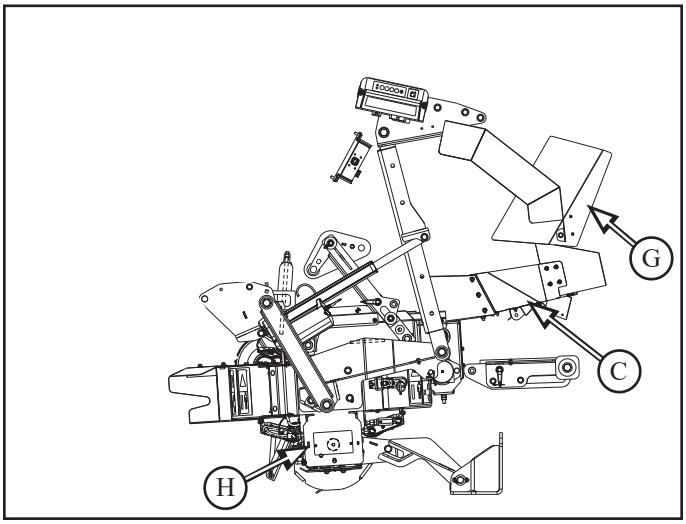
Chaff Impact Mill (**E**)
Damages and devitalizes seeds

Vent Covers (**G**)
Forces all chaff flow into SCU (**A**)
Prevents seed losses prior to SCU (**A**)

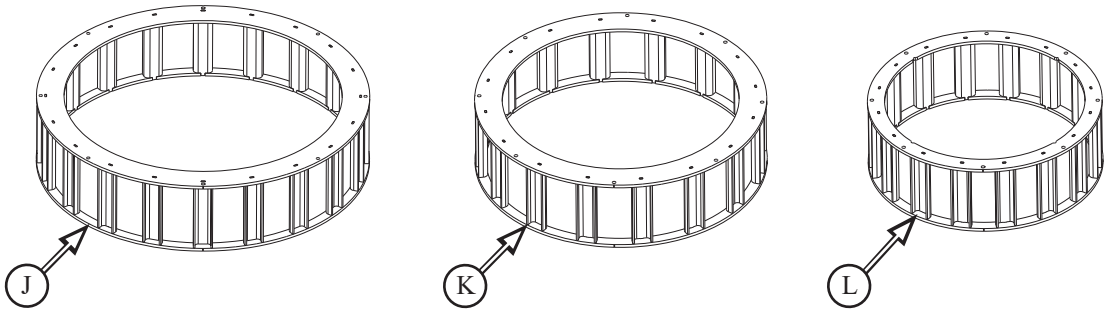
Hydraulic Circulation Pump (**H**)
Circulates gearbox oil through cooling system



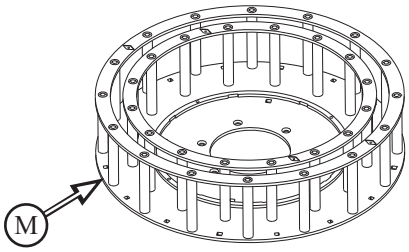




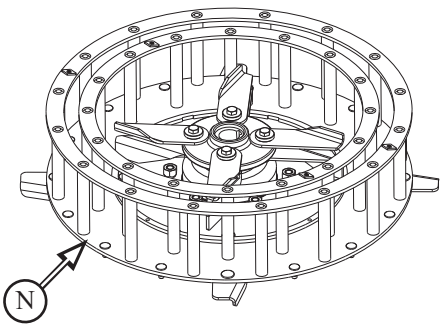
Stator Rings
Outer (**J**), Middle (**K**), Inner (**L**)



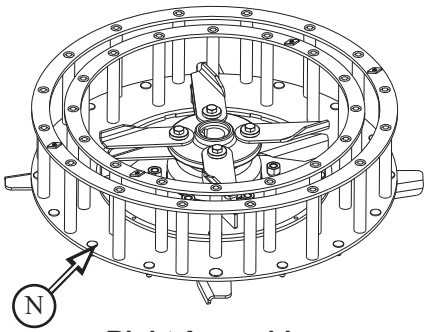
Rotor (**M**)



Rotor Assembly with hub, scraper and fan blades (N)



Left Assembly



Right Assembly

Sound Level

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.

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

2.1 Operation Modes

There are three (3) modes of operation:

1 - SCU mode / Chop mode with straw thru chopper, chaff thru SCU
- SCU mode / Windrow mode with straw over chopper, chaff thru SCU

3 - Service mode for:
- combine sieve accessability
- SCU drive belt installation
- SCU removal

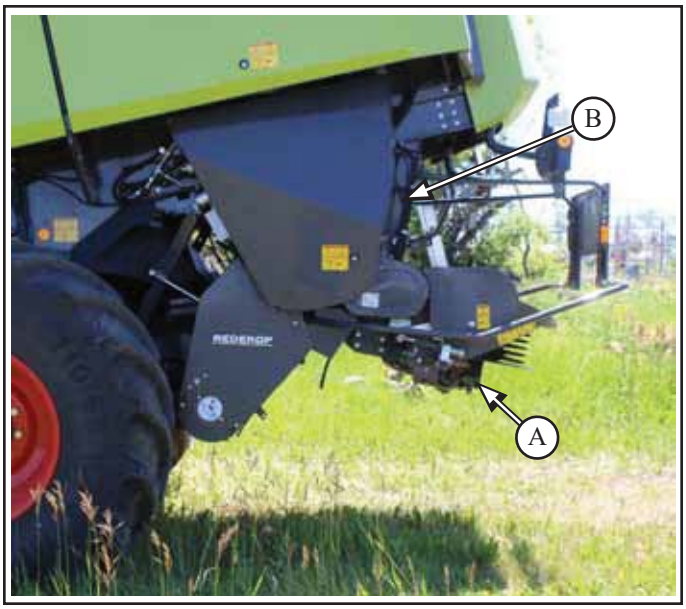
2 - SCU Bypass mode / Chop mode with straw thru chopper, chaff thru bypass configured SCU
- SCU Bypass mode / Windrow mode with straw over chopper, chaff thru bypass configured SCU

To switch from one mode to another, the following actions are required:

2.1.1 Seed Control Unit and Chopper Mode

2.1.1.1 Maintain tailboard/power spinners (**A**) parallel to ground

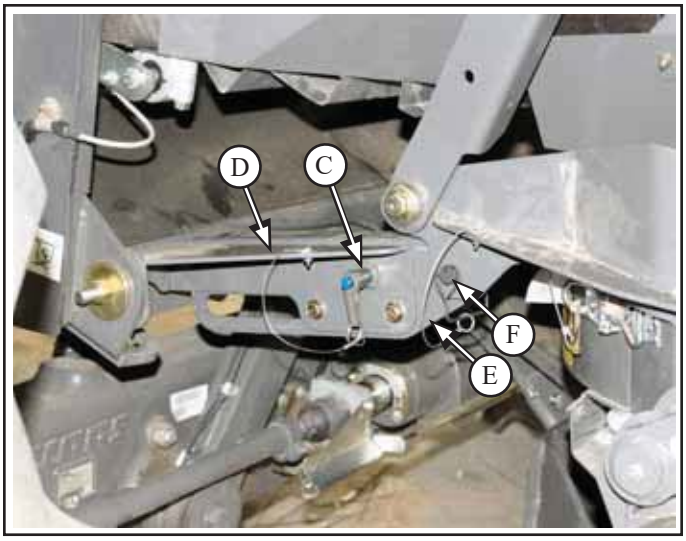
2.1.1.2 Rotate OEM straw door (**B**) down



2.1.1.3 Ensure SCU is in most forward position and link arms (**D** & **E**) are secured in place

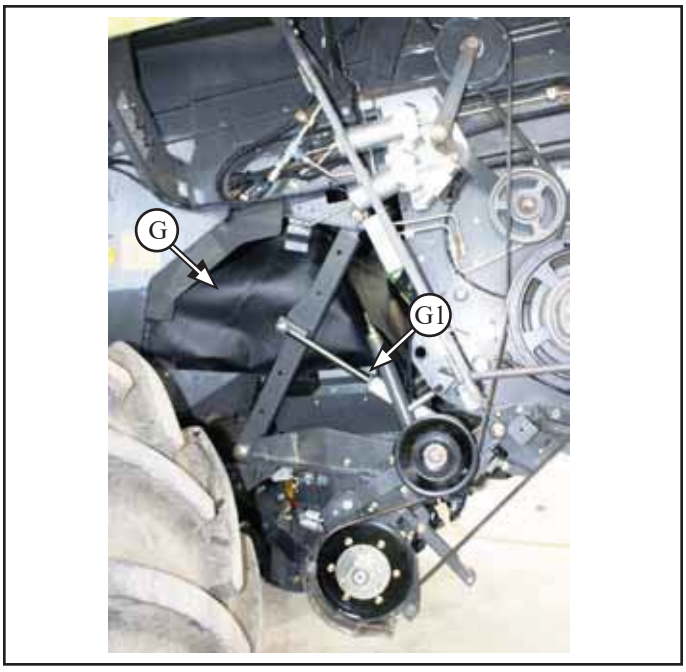
2.1.1.3.1 Pin (**C**) is thru pivot arm (**D**) and in rear most hole of sliding bracket (**E**)
- both sides

2.1.1.3.2 Pin (**F**) is thru SCU into sliding bracket (**E**)
- both sides



2.1.1.4 Ensure curtain and brackets (**G** & **G1**) are securely affixed to all of the magnets around the SCU hopper inlet

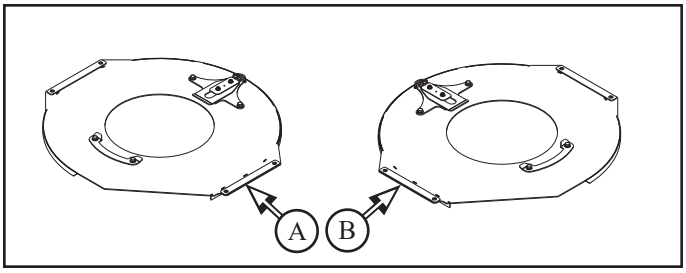
Failure to secure curtain to magnets on hopper will result in chaff leakage



2.1.2 Seed Control Unit Bypass and Chopper Mode

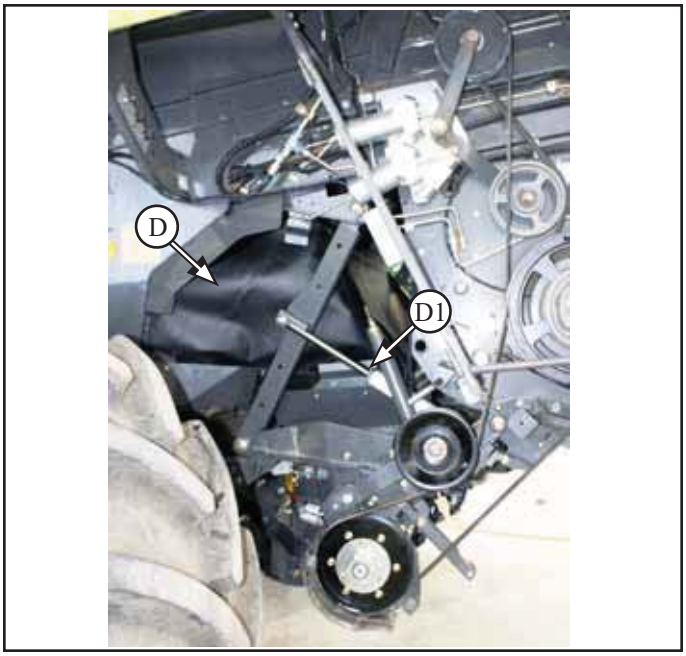
Parts List:

SC1064CAL	Plate Top Blank SCU Assy LT (**A**)	Qty 1
SC1064CAR	Plate Top Blank SCU Assy RT (**B**)	Qty 1

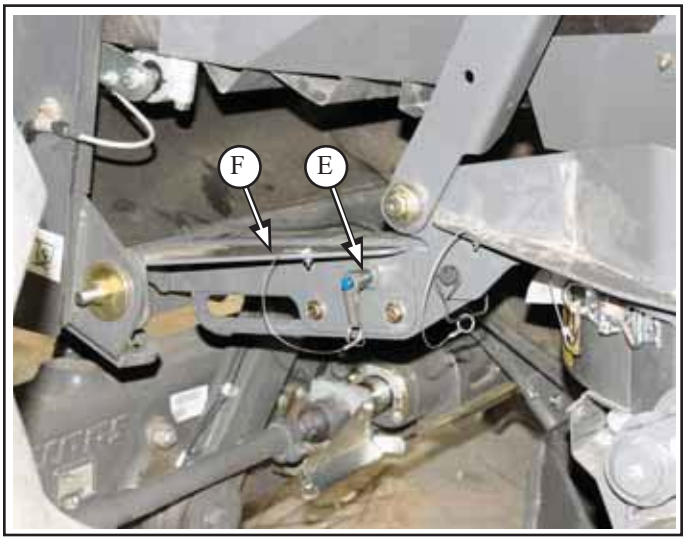


2.1.2.1 Maintain tailboard/power spinners parallel to ground

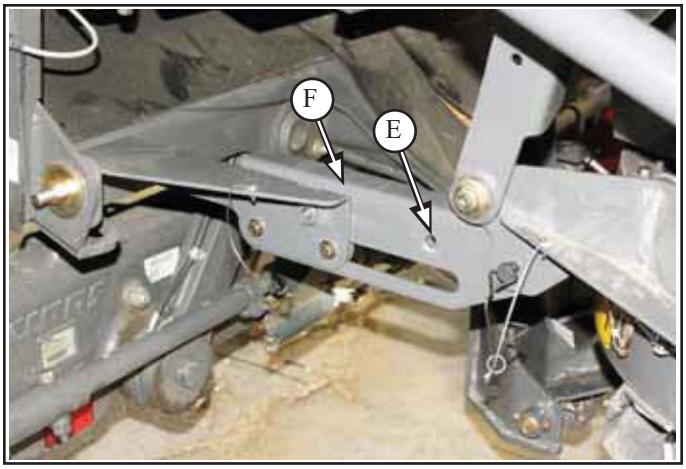
2.1.2.2 Detach curtain (**D**) brackets (**D1**) from magnets around the SCU hopper inlet



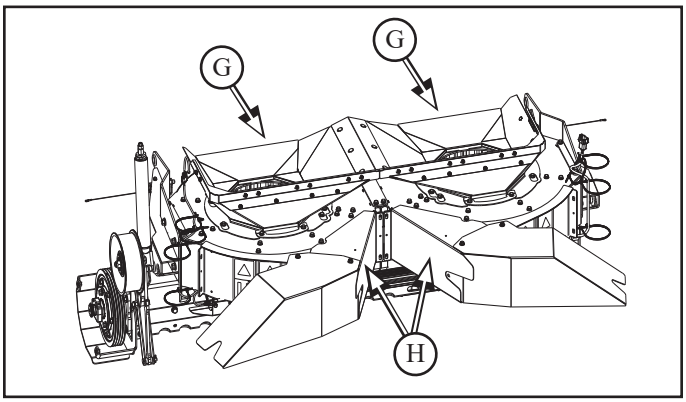
2.1.2.3 Remove pin (**E**) from pivot arm (**F**) - both sides



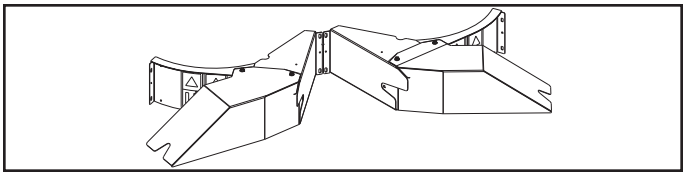
2.1.2.4 Move SCU slightly rearwards till pivot arm (**F**) is fully extended
- reinstall pin (**E**) once pivot arm is fully extended
- provides additional room for converting to bypass mode
- both sides



2.1.2.5 Remove inlet hoppers (**G**) and outlets assemblies (**H**)
- to be reinstalled
- mounting hardware to be reused

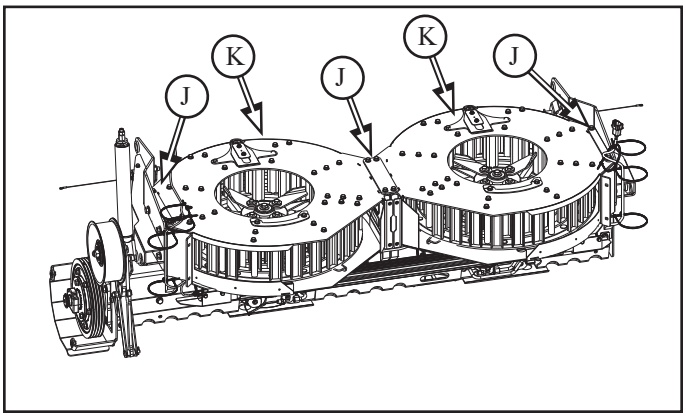


2.1.2.5.1 View of inlets removed from SCU

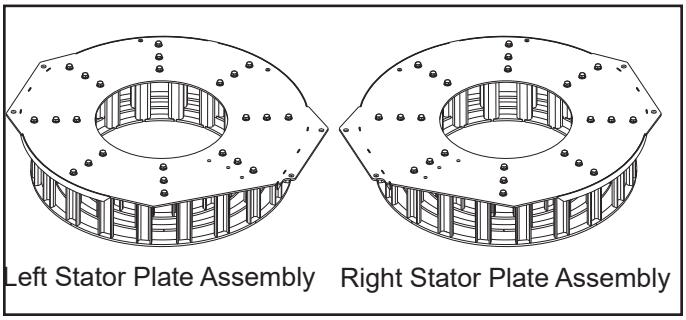


2.1.2.6 Remove top stator link brackets (**J**)
- To be reinstalled
- mounting hardware to be reused
- both sides

2.1.2.7 Remove top stator plate assemblies (**K**)
- both sides
- Store in a safe location till SCU mode is required

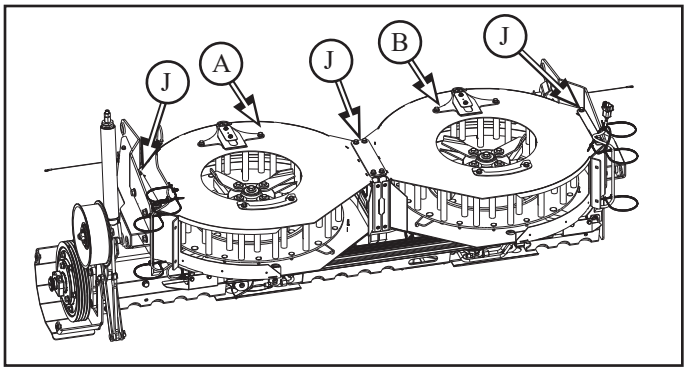


2.1.2.7.1 View of removed stator assemblies

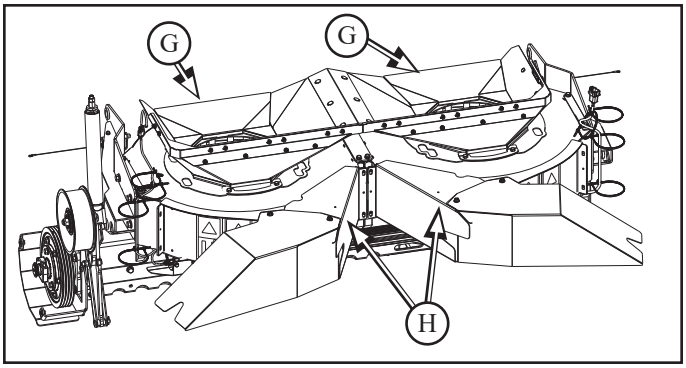


Blankout top plate installation

2.1.2.8 Install bypass top plates (**A**) and (**B**)
- reuse hardware and top stator link brackets (**J**)



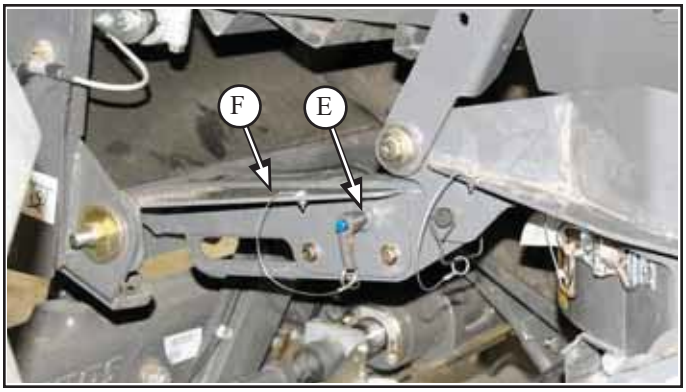
2.1.2.9 Install inlet hoppers (**G**) and outlets (**H**)
- reuse hardware
- both sides



Move back into SCU position:

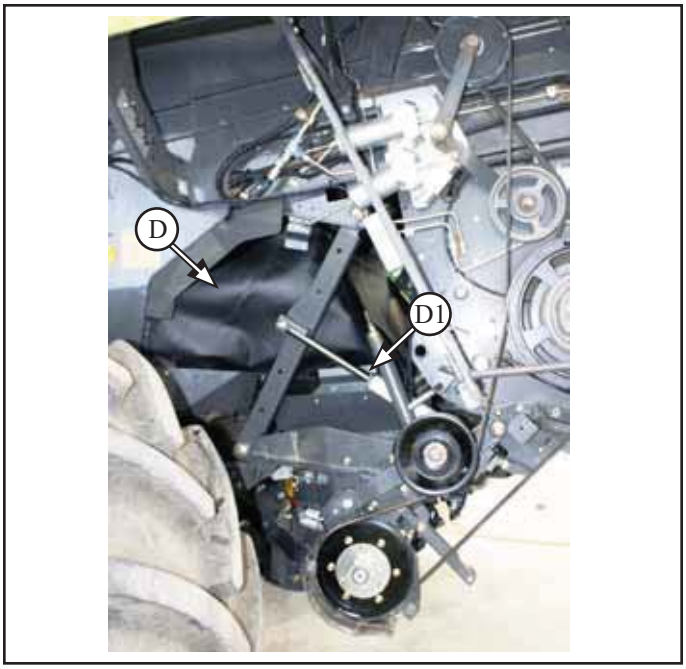
2.1.2.10 Remove pin (**E**) from pivot arm (**F**)
- both sides

2.1.2.11 Slide SCU into forward operating position and reinstall pin (**E**) into pivot arm (**F**)
- both sides



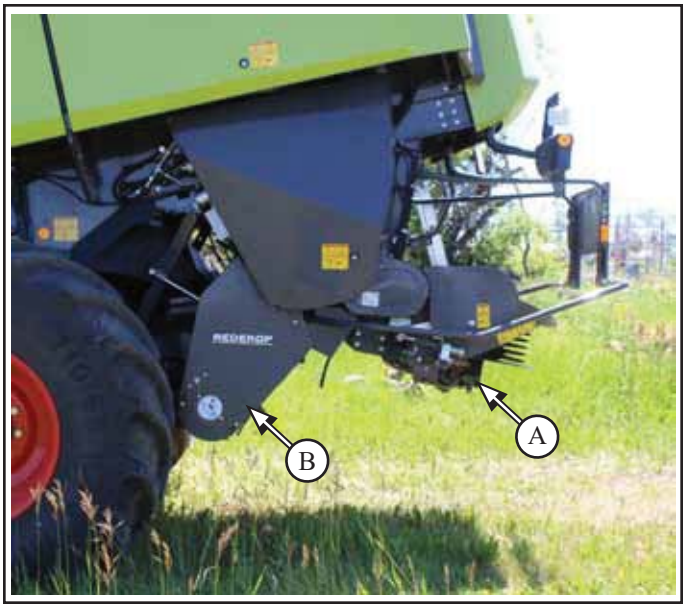
2.1.1.12 Attach curtain and brackets (**D** & **D1**) to all of the magnets around the SCU hopper inlet

Failure to secure curtain to magnets on hopper will result in chaff leakage



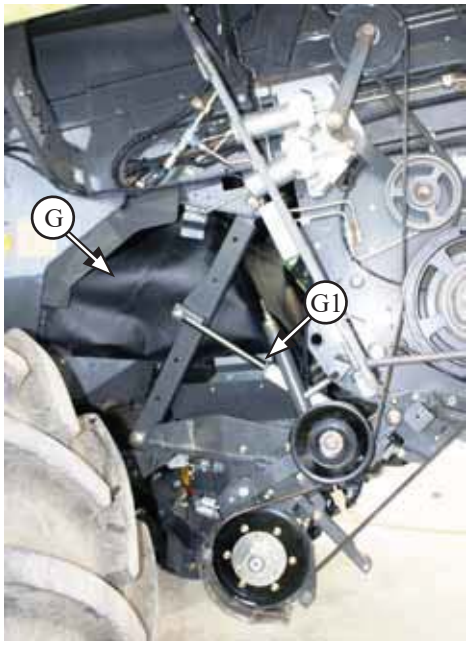
2.1.3 Service Mode

2.1.3.1 Remove drive shield (**B**)

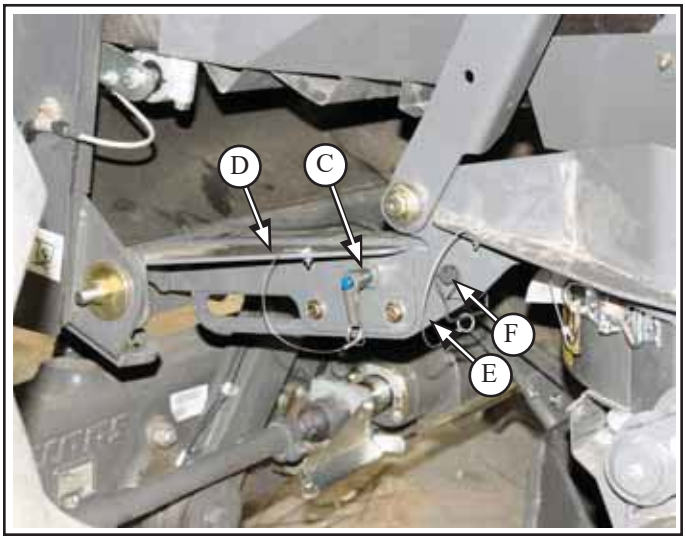


2.1.3.2 Detach curtain brackets (**G1**) from magnets around the SCU hopper inlet

Failure to detach curtain from magnets may result in curtain damage

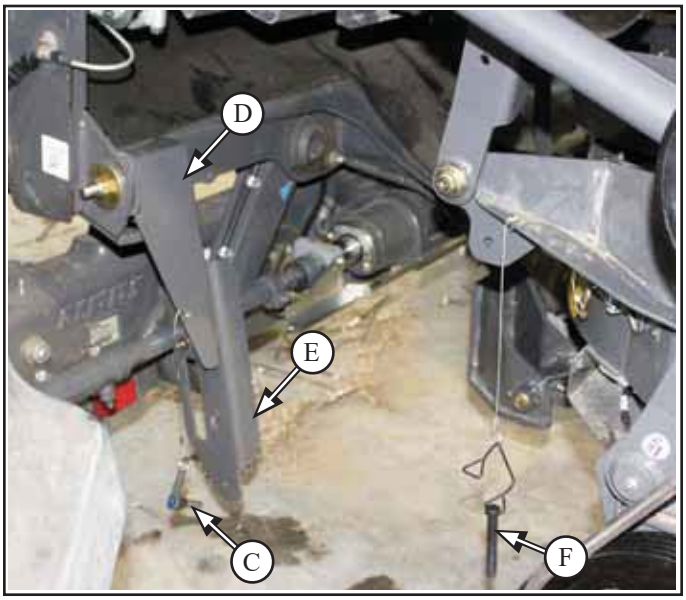


2.1.3.3 Remove pin (C)
- both sides



2.1.3.4 Move SCU slightly rearwards

2.1.3.5 Remove pin (**F**)
- both sides



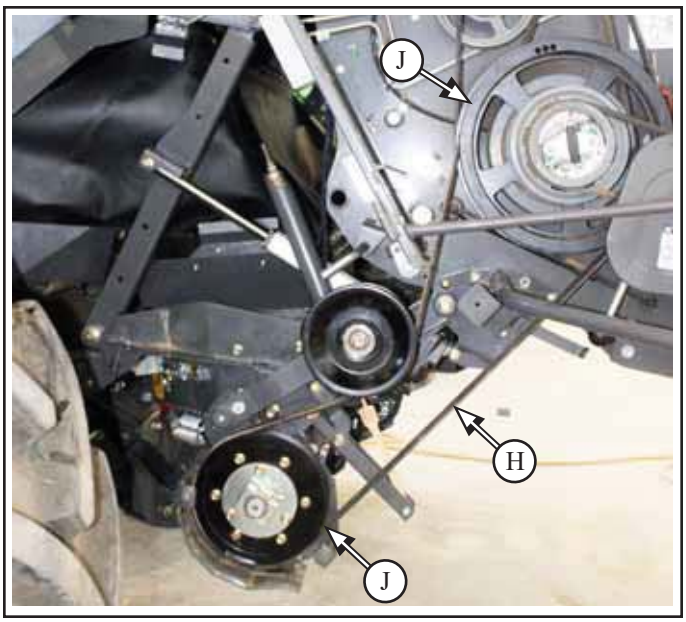
2.1.3.6 Showing SCU in service mode with full access to rear of combine

2.1.3.7 Move SCU back into operating position

2.1.3.7.1 Move SCU forward into a position where pin (**F**) can be installed
- both sides

2.1.3.7.2 Ensure SCU drive belt (**H**) is seated correctly on pulleys (**J**)

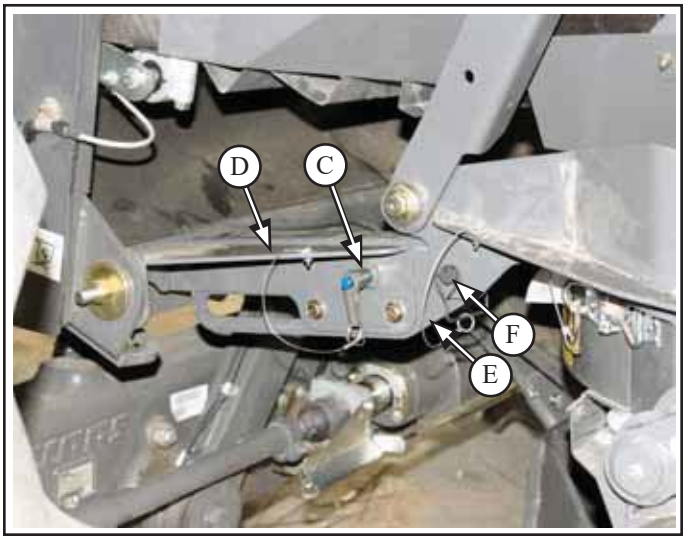
2.1.3.7.3 Move SCU fully forward



2.1.3.7.4 Ensure SCU is in most forward position and link arms (**D** & **E**) are secured in place

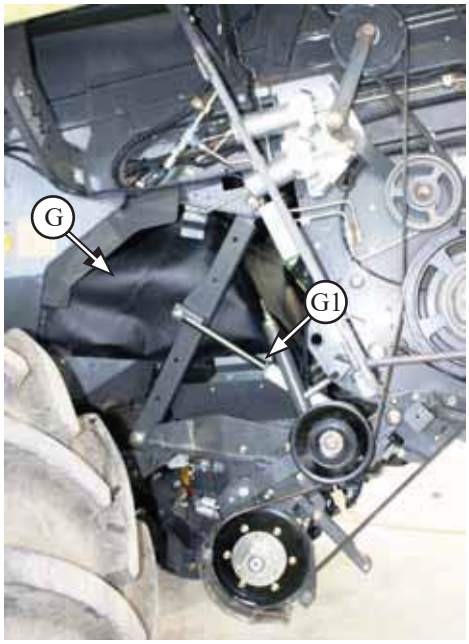
2.1.3.7.5 Pin (**C**) is thru pivot arm (**D**) and in rear most hole of sliding bracket (**E**)
- both sides

2.1.3.7.6 Pin (**F**) is thru SCU into sliding bracket (**E**)
- both sides



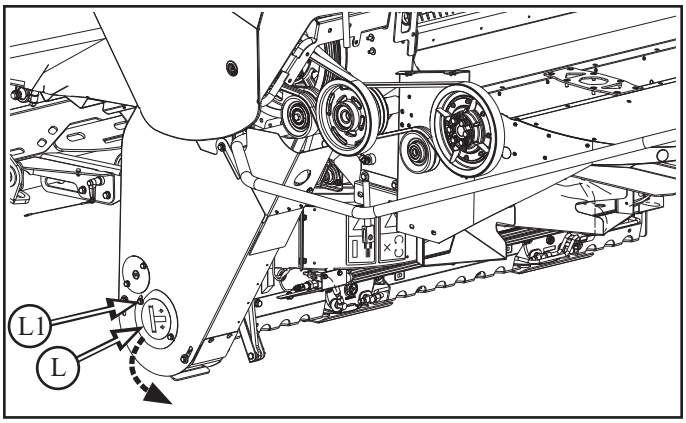
2.1.3.7.7 Ensure curtain and brackets (**G** & **G1**) are securely affixed to all of the magnets around the SCU hopper inlet

Failure to secure curtain to magnets on hopper will result in chaff leakage



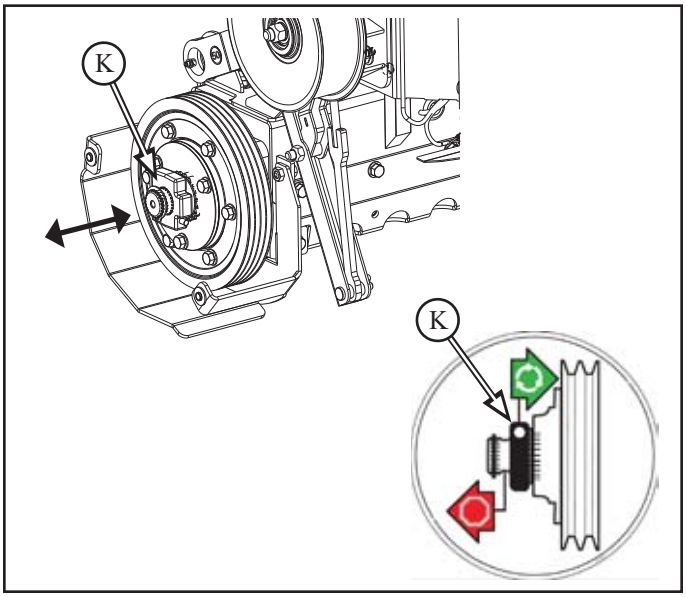
2.2 SCU Drive Engagement

2.2.1 To access the drive shaft coupler (**K**):
- Loosen top bolt (**L1**)
- Rotate access cover panel (**L**) away



2.2.2 To engage the SCU drive:
- unlatch and slide Drive Shaft Coupler (**K**) in

To disengage the SCU drive:
- unlatch and slide Drive Shaft Coupler (**K**) out when SCU is not required.



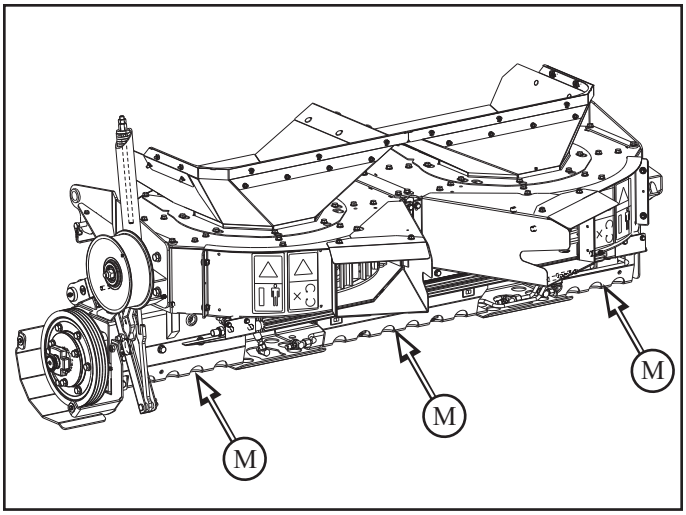
May be HOT to touch
- wear gloves or wait to cool!

Projectile Hazard from SCU
Stand Clear when SCU is in operation

2.3 Driveline Guards

Do Not operate with Driveline Guards (**M**) removed

Guards provide structural integrity - if removed, SCU frame will crack



3 MAINTENANCE

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

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

BREAK-IN SERVICE MAINTENANCE - During first 50 hours

- Perform daily or 10 hour service (refer to **Daily Maintenance** in this section)

- Check oil level of both gear boxes more frequently. Watch for any signs of leaks on lines and connections

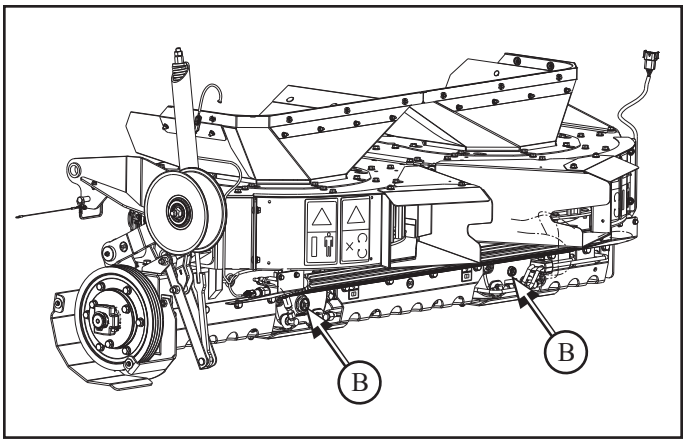
- Check drive belts for proper tension and adjust if necessary

- Check bearing lock collar is locked onto driveline shaft

DAILY MAINTENANCE

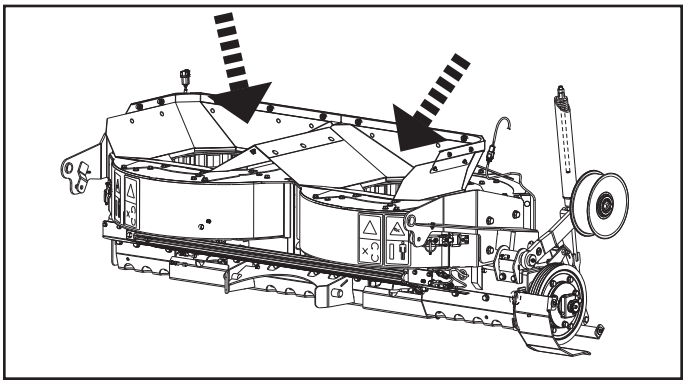
- Check Oil Level of Gear Boxes through sight glasses (**B**) for both gear boxes

- Check for oil leaks along hoses and connections

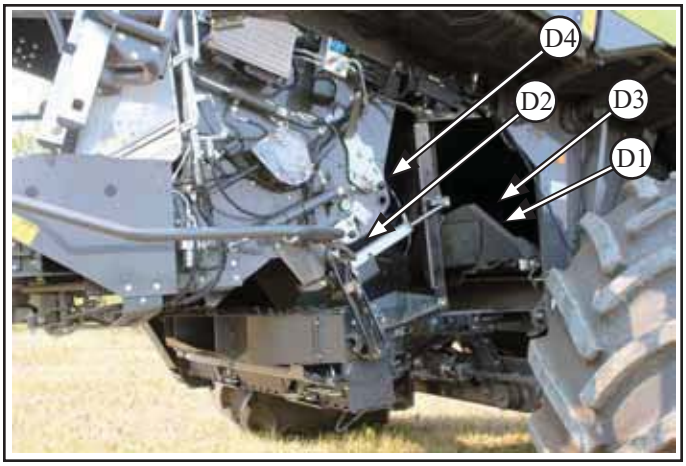


- Check Belt (**C**) Tension and that Spring Tensioner (**C1**) is at indicator on guide

- Clean off residue from top of Seed Control Unit to prevent excess moisture from collecting



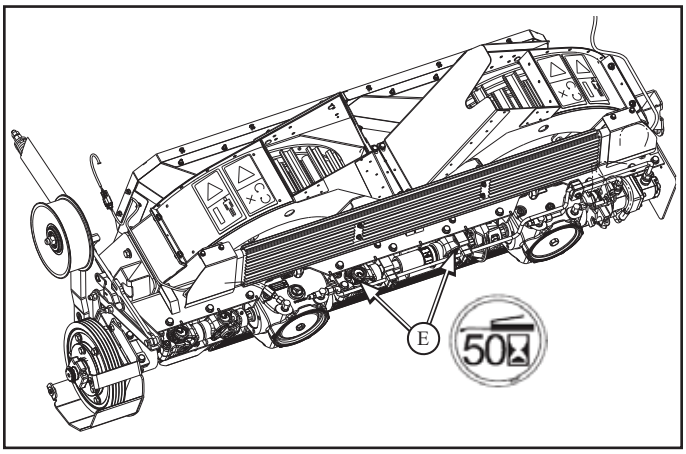
- Check that all rubber components are in place
  - Shoe location **D1**
  - Inside SCU hoppers **D2**
  - Curtain **D3**
  - Deflector **D4**



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

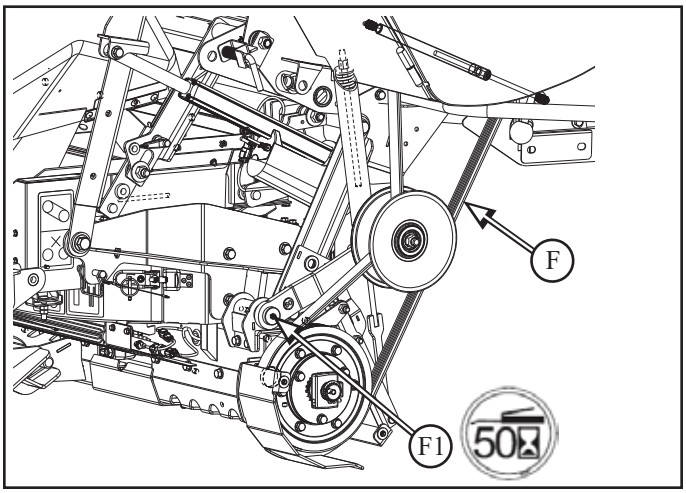
WEEKLY MAINTENANCE

- Grease Drive Shaft between gear boxes at 50 hour grease nipple (**E**) x2
  - turn pulley until grease zerks are visible between guard holes (guards not shown for illustration purposes only)



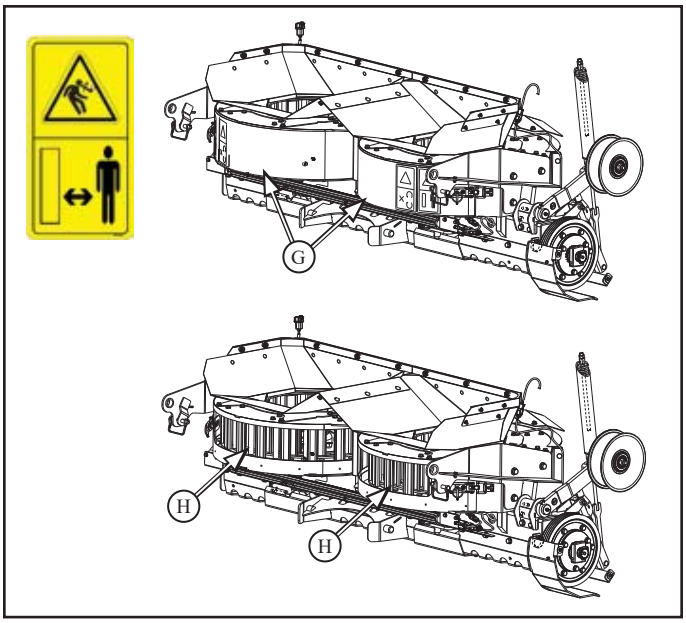
- Check Drive Belt (**F**) for wear and proper tension
  - adjust belt tension if required

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



- Remove Front Access Panels (**G**) and Check Rotors and Stators (**H**) for build up of material and wear

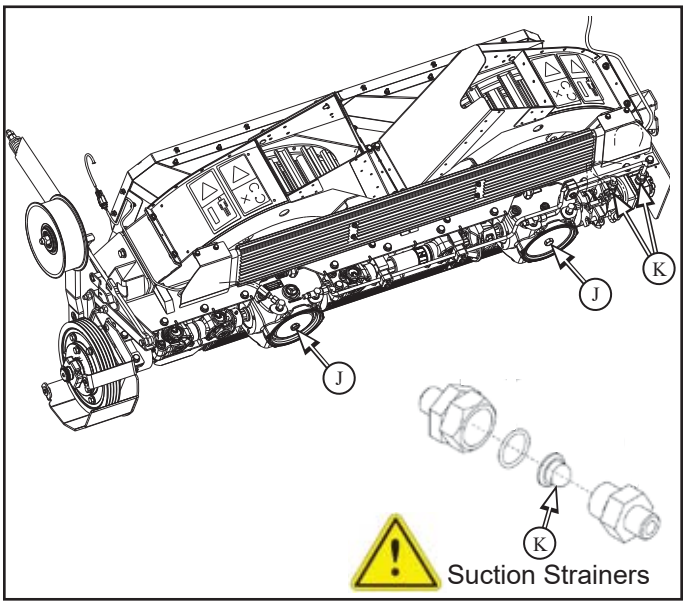
Kickback Hazard when removing access panels
- panel will spring back when unlatched



FIRST 100 HOURS MAINTENANCE

Change Oil in Gear Boxes **(J**), refer to section 3.4

Check and clean Suction Strainers (**K**), refer to section 3.6



Suction Strainers

ANNUAL MAINTENANCE

- Drain gearbox oil and refill with new oil

- Check and clean suction strainers

- Check for oil leaks

- Check bearings

- Check drive belt wear

- Clean Seed Control Unit interior and exterior

- Check stators and rotor for wear and breakage

- Check fan and scraper blades for wear

- Check for loose hardware, broken metal pins or components

- Check bearing lock collar is locked onto driveline shaft

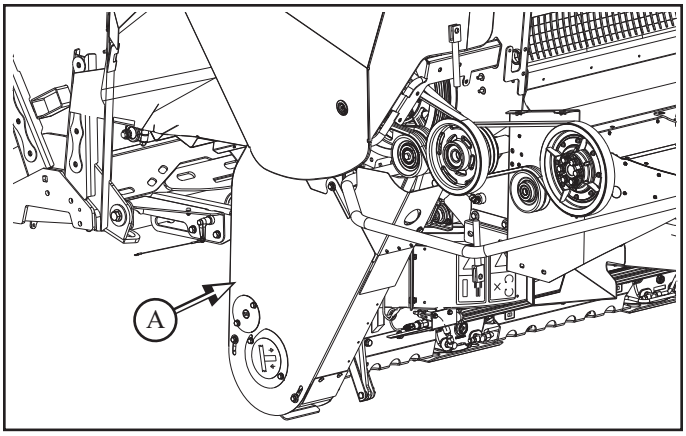
Review remainder of Operator's Manual for complete maintenance checks and procedures

3.1 DRIVE BELT

Recommended Service Interval - 70 hours - Weekly

To access the SCU drive belt:

Remove lower drive belt shield (**A**)
Reinstall after all belt adjustments have been made



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

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

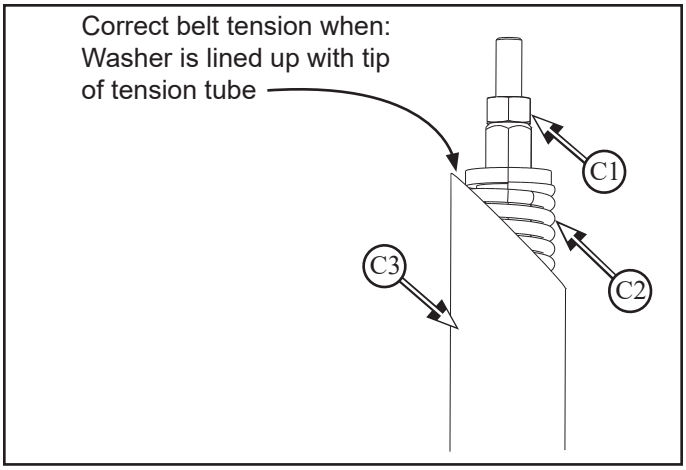
3.1.1 Seed Control Unit Drive Belt

To adjust tension of the drive belt (**C**)::

Tighten or loosen tension nut (**C1**) in such a way that the length of the spring (**C2**) equals the length of the gauge (**C3**) Loosen the tension on the tensioning system if the belt has to be replaced

Keep Hands Out!

NEVER OPERATE WITHOUT SHIELDS IN PLACE!

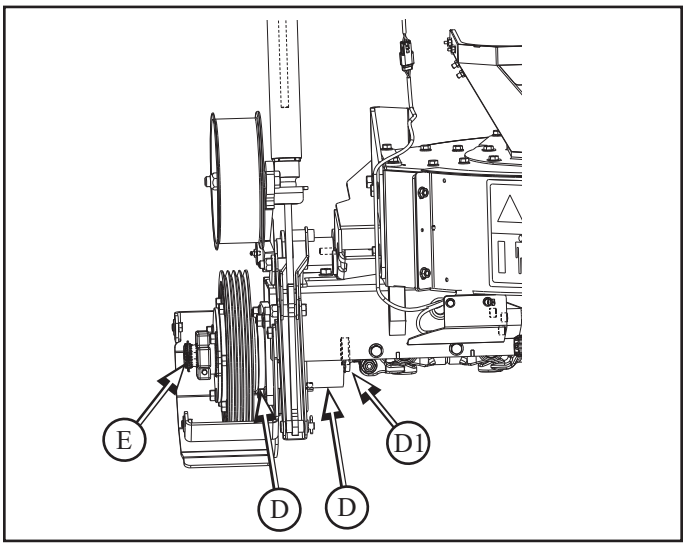


3.2 BEARINGS (D)

Recommended Service Interval - Annually

Bearings comes pre-greased, there is no requirement to grease.

Check bearing lock collar (**D1**) is locked onto driveline shaft (**E**)



3.3 COSMETIC

Recommended Service Interval - 10 hours - Daily

Clean off residue from top of Seed Control Unit to prevent excess moisture from collecting.

3.4 GEARBOX (C)

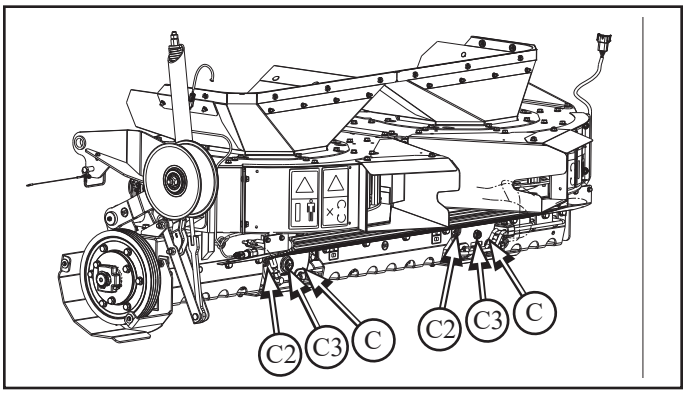
Recommended Service Interval - After 1st 100 hours - Annualy

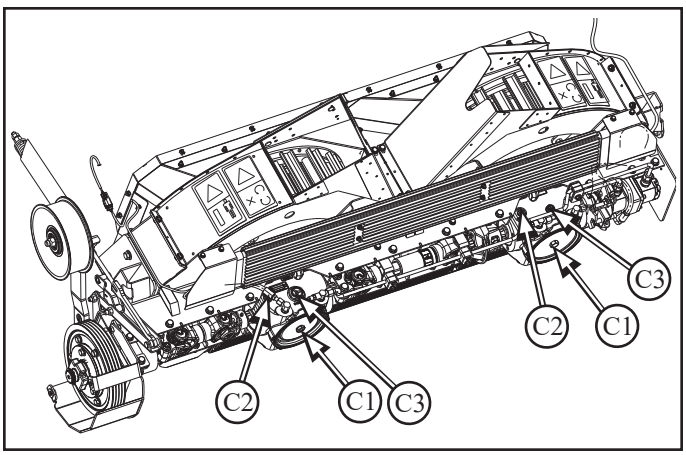
After 1st 100 hours - Gearbox break-in
- Drain oil through bottom plug (**C1**)
- Replace oil with synthetic 75W-90 synthetic gear oil, with GL4 or GL5 extreme pressure rating
  - 1.1 litres of oil per gearbox
  - 3 litres of oil for complete circuit when completely drained, including gearboxes

- Check and clean suction strainers as per section 3.6

- Check and clean plug magnet (**C1**) before reinstalling

- Fill oil at plug (**C2**) until sight gauge (**C3**) is full, run system at low speed, stop and fill until oil level is in middle of sight guage

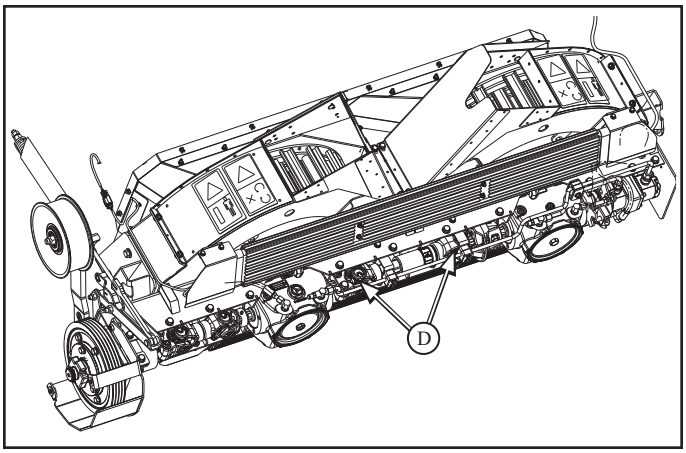




3.5 DRIVELINES (D)

Recommended Service Interval - 50 hours - Weekly

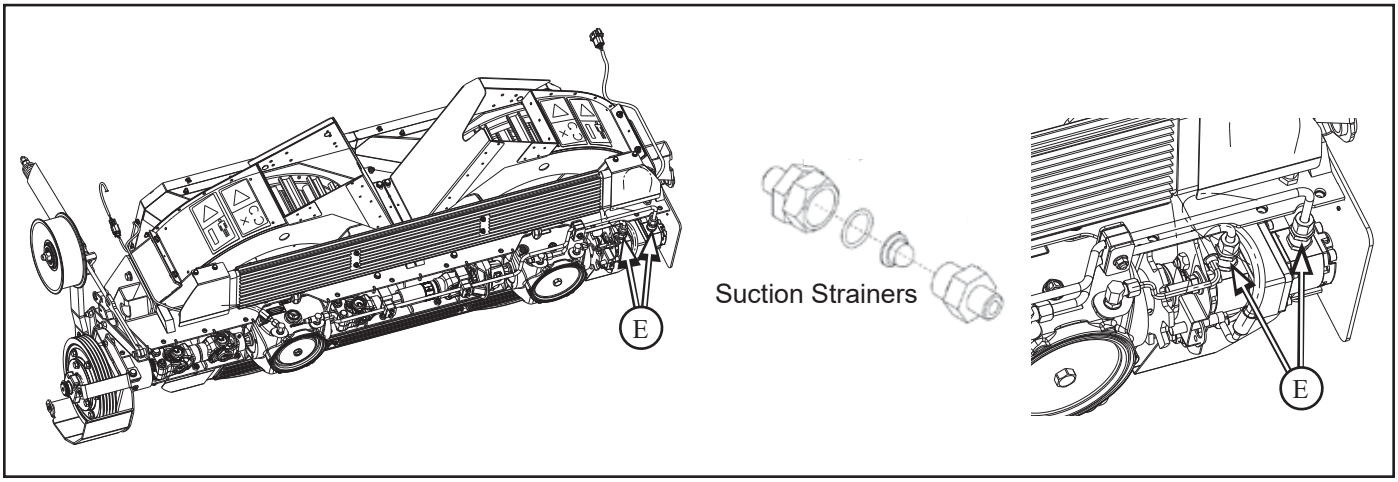
Grease weekly (**D**)



3.6 INLINE SUCTION STRAINER (E) FOR COOLING SYSTEM

Recommended Service Interval - After 1st 100 hours - Annualy

Check and clean suction strainers (**E**)
Reassemble



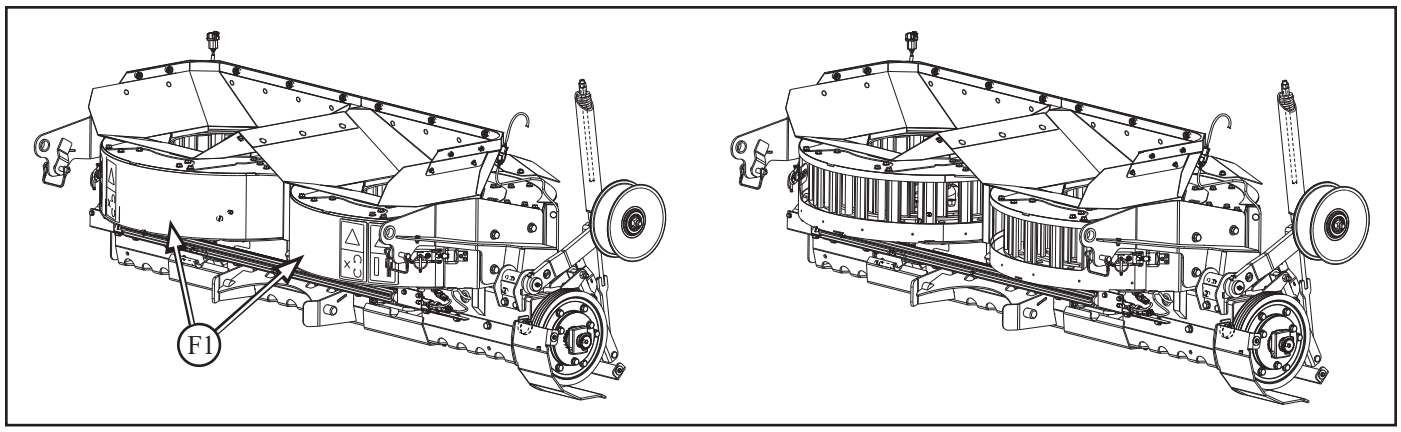
3.7 CLEANOUT (F)

Recommended Service Interval - As required or Annualy

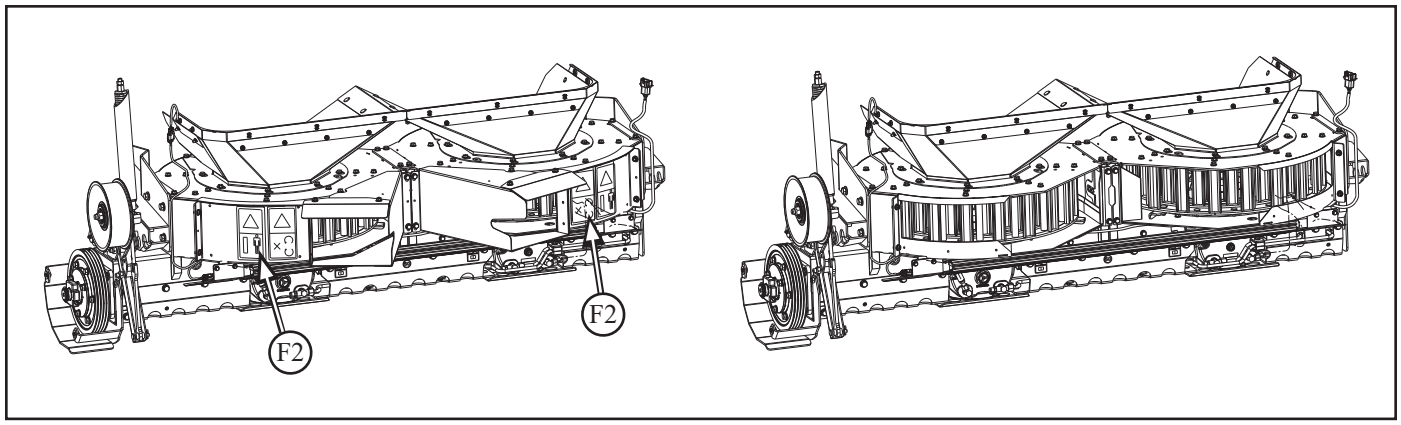
Thoroughly clean the out debris from SCU and inside of chaff impact mill with compressed air (if equipped, use integrated air compressor system).

- remove front access panels (**F1)** and use air wand.
If debris is stuck in place, may require to remove rear discharge panels (**F2)** for better access

- ensure access panels (**F1**) are sitting on bottom lip and sealed along complete door



Kickback Hazard when removing access panels
- panel will spring back when unlatched



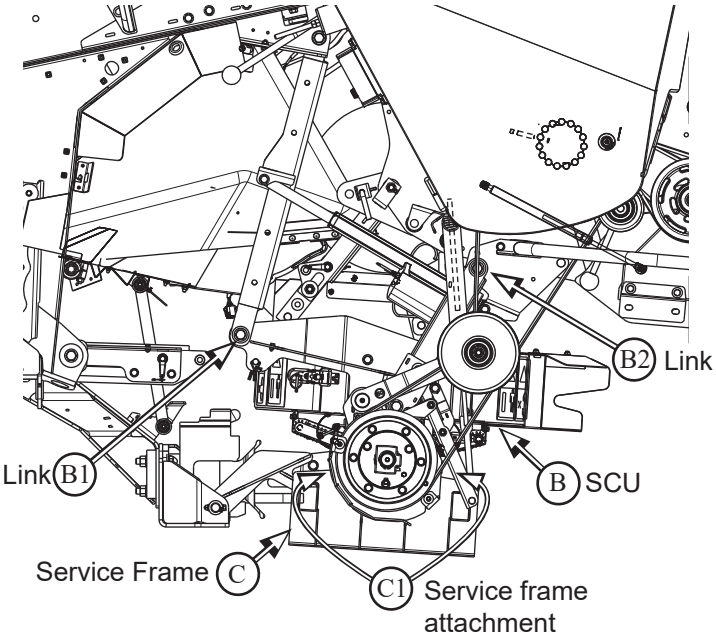
REDEKOP™

3.8 STATORS (G)

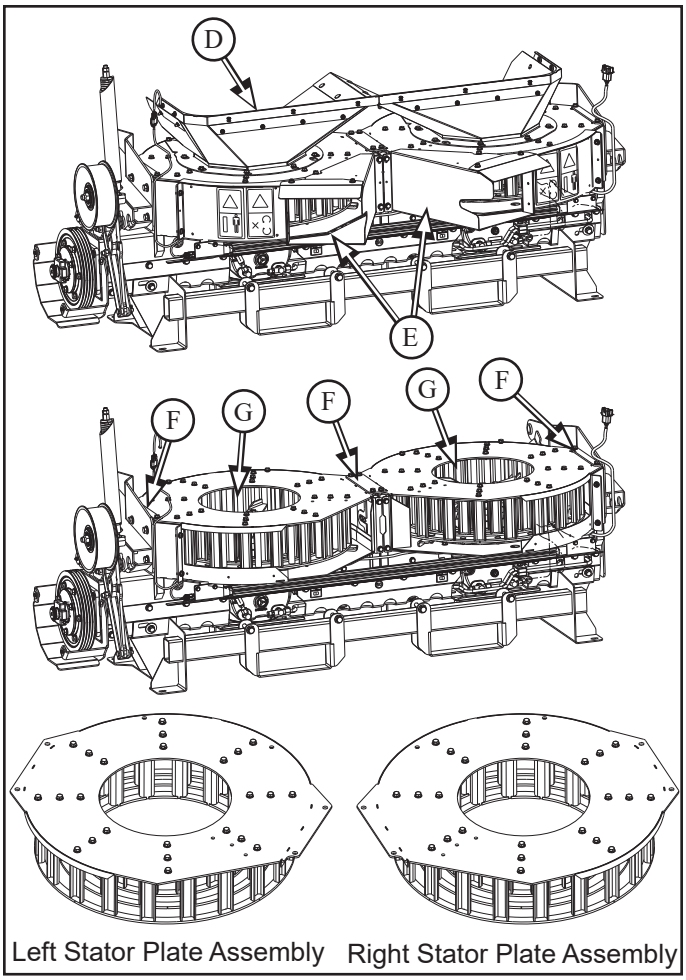
Recommended Service Interval - Annualy

To service/replace the rotors and stators, the SCU must be removed from the chopper.

1. Use proper lifting equipment
2. Remove drive shield
2. Move SCU (**B**) to service mode position
3. Remove drive belt
4. Attach service frame (**C**) to SCU (**B**) at (**C1**) both sides
   - with forklift supporting SCU in service frame
5. Disconnect all harness connectors and ties to SCU
6. Remove SCU (**B**) from Combine (**A**)
   - remove link mount hardware (**B1**)
   - remove link mount hardware (**B2**)
   - both sides
7. Lower SCU (**B**) until hopper clears bottom of the chopper and set on to level ground for servicing
   - for full access to the SCU, forklift can be removed



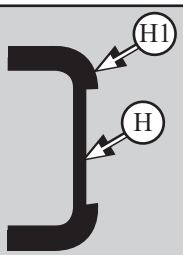
To access stators (**G**) with the SCU removed from the straw chopper:
- remove hopper (**D**) from top of SCU
- remove rear discharge panels (**E**)
- remove top stator link brackets (**F**)
- remove top stator plate assemblies (**G**) left and right
- clean and inspect for wear and breakage on stators (**H**) left and right



Remove the top plates (**G1**) from the stator assembly (**G**)

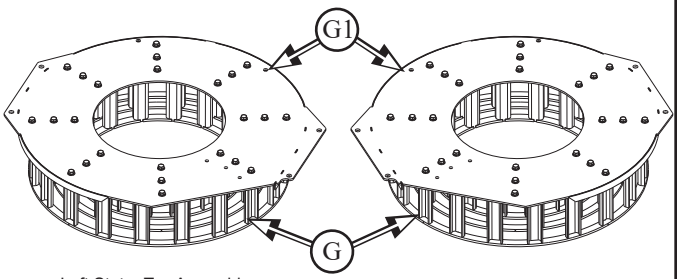
Worn Stators on left assembly can be removed from top plate, reassembled to right stator plate, and mounted on the right side. Same process applies for the right assembly.

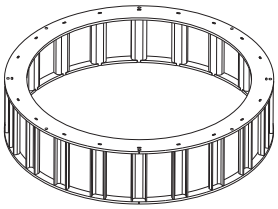
Replace worn out or broken stator sections.



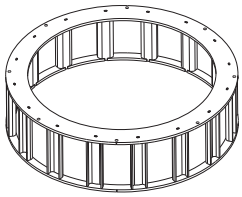
Once coating (**H1**) on stator bars (**H**) has worn through one side, move the stator ring to the opposite side.

If allowed to continue wearing beyond the coating into the material of the bar, the structural integrity will be damaged and cannot be reused.

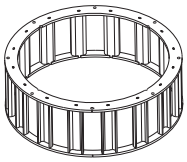




Outer Stator Ring Insert 20 U Bar



Mid Stator Ring Insert 16 U Bar



Inner Stator Ring Insert 16 U Bar

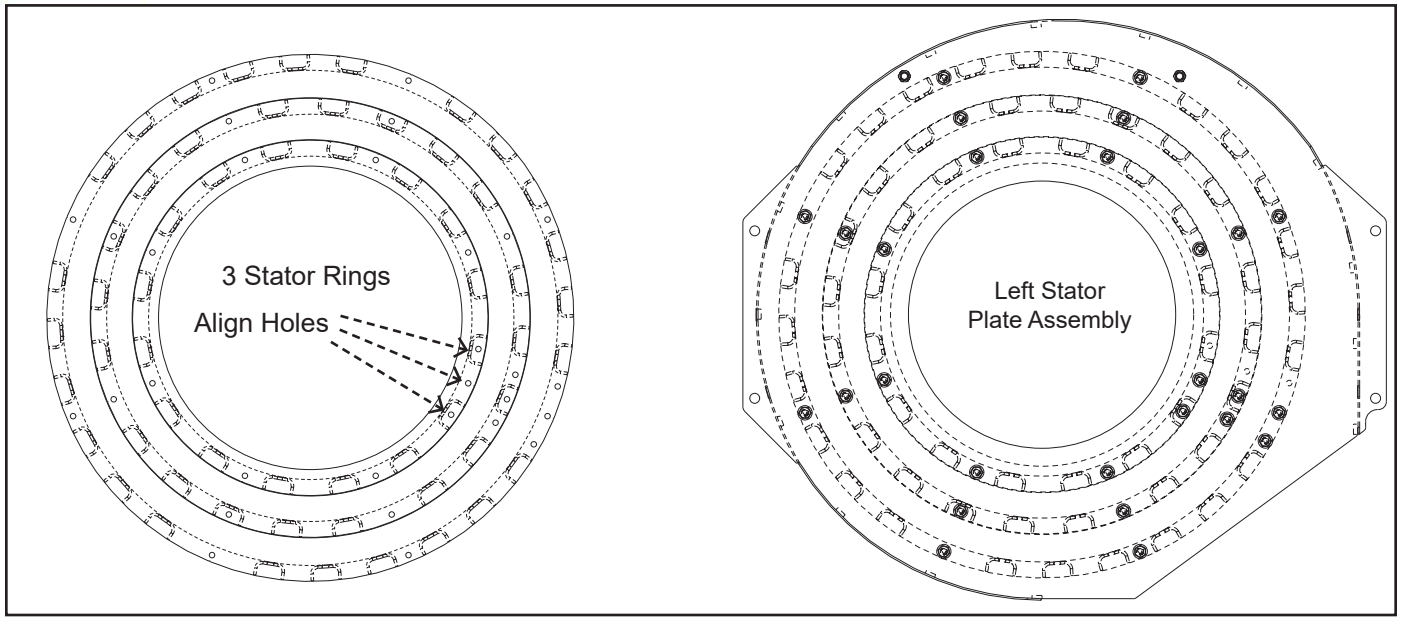
Assemble stators to top cover plates as follows:

- place stator rings inside of each other
  - inner, middle and outer

Stators without the 3 bolt holes on top of each of the stator rings - align holes to each stator

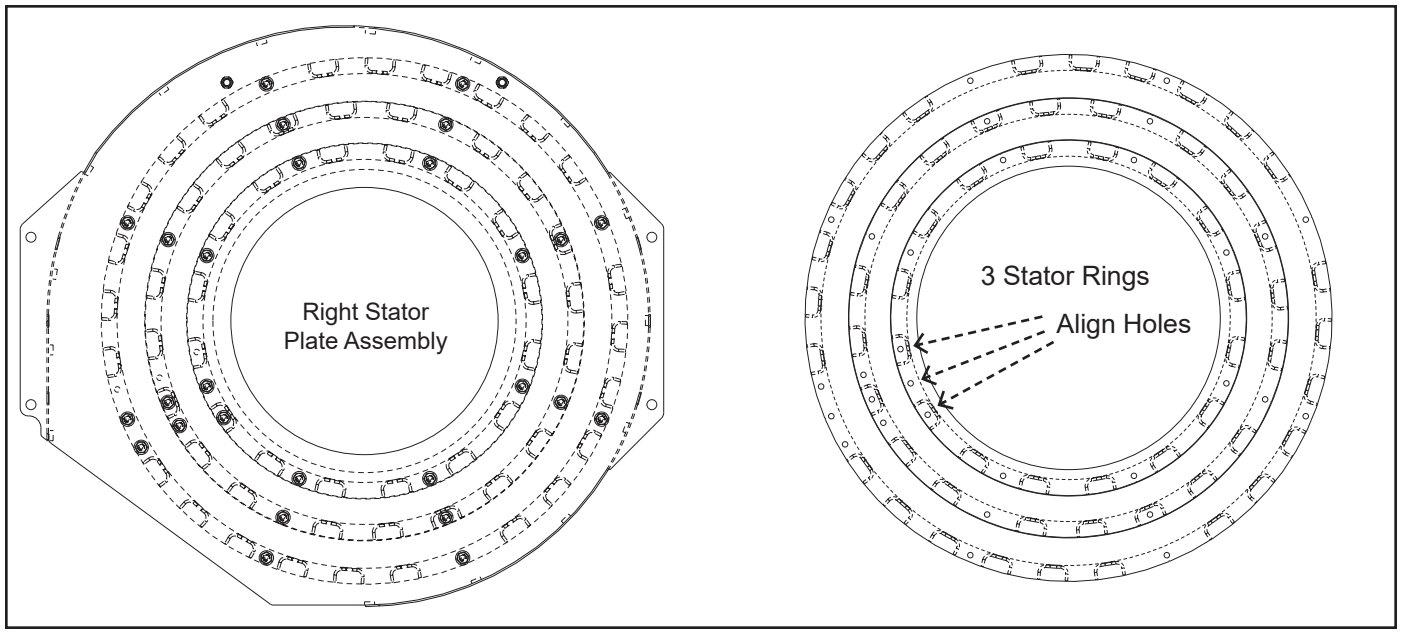
Stators with the 3 bolt holes on top of each of the stator rings - align with the following procedure:

Align the 3 bolt holes on top of each of the stator rings together, middle holes will line up



Assemble top plate onto stators

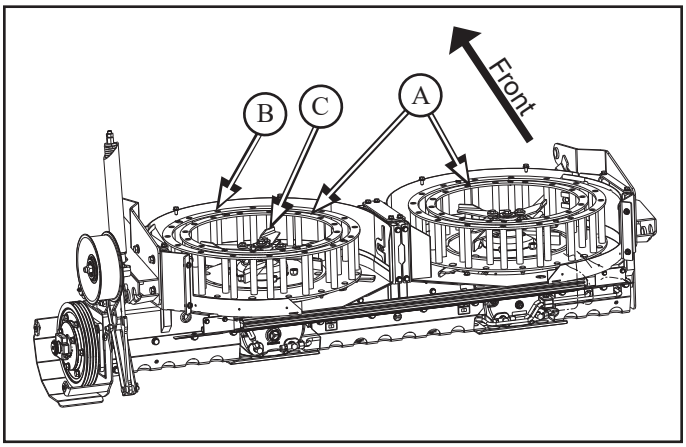
- Start all mounting bolts by hand and hand wrench/spanner so threads do not get damaged in stators



3.9 ROTOR (H)

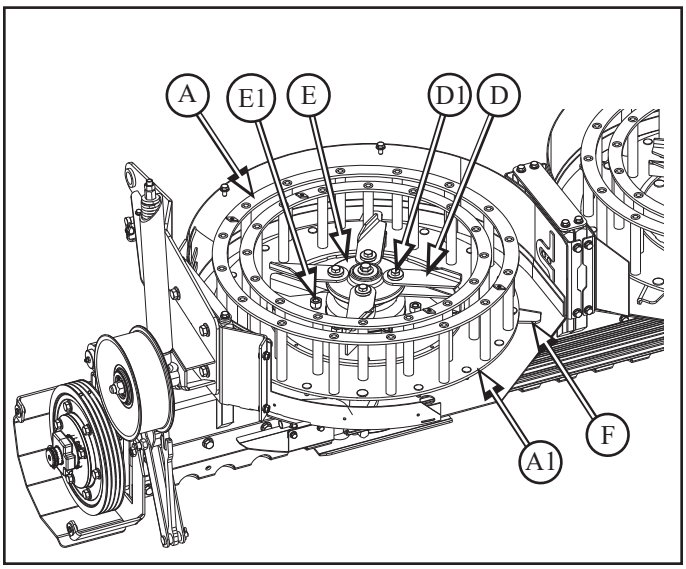
Recommended Service Interval - Annualy

With Stator Assemblies removed:
Clean and check Rotor Assemblies (**A**) left and right for wear and damage
Replace worn out top Scrapers (**B**)
Replace worn out Fan Blades (**C**)



The Rotor Assemblies (**A**) may have to be removed to replace the bottom scraper blades (**F**) or for rotor (**A1**) replacement or to move to other side of SCU

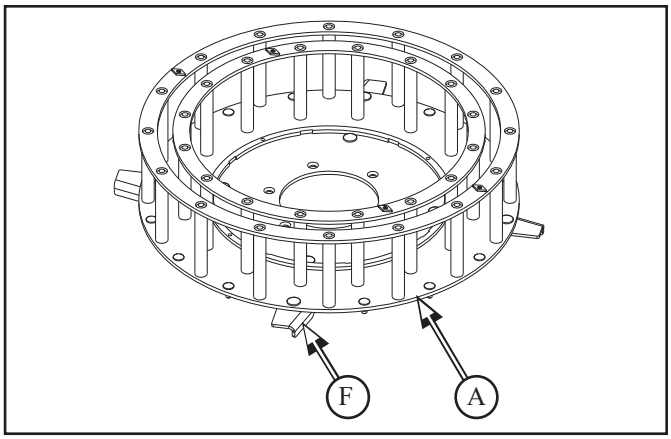
To remove the Rotor Assembly (**A**) from the SCU:
- remove fan blades (**D**) mounting bolts and hardware (**D1**) x4
- remove rotor to hub (**E**) mounting bolts (**E1**) x6 from bottom of rotor (**A**)
- pull rotor (**A**) off of SCU
- repeat for other side



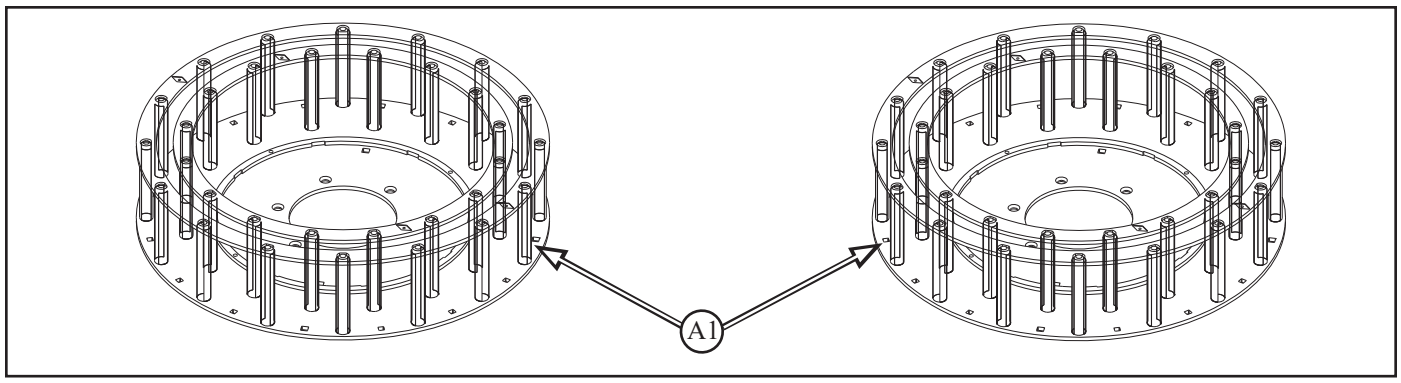
Fan Blades and Hardware:

Check all bushings and hardware for cracks, breaks and wear. Replace with new if broken.

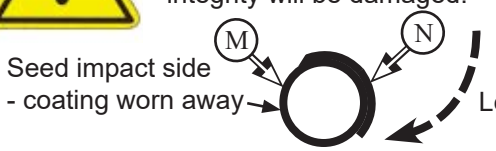
Remove scraper blades (**F**) from bottom of rotor assembly (**A**)



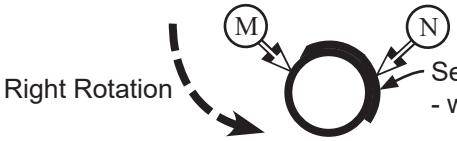
Check rotor for wear on rotor bar coating



Once coating (**N**) on rotor bars (**M**) has worn through one side, move the rotor (**A1**) to the opposite side. If allowed to continue wearing beyond the coating (**N**) into the material of the bar (**M**), the structural integrity will be damaged.



Worn out rotor bar on left rotor



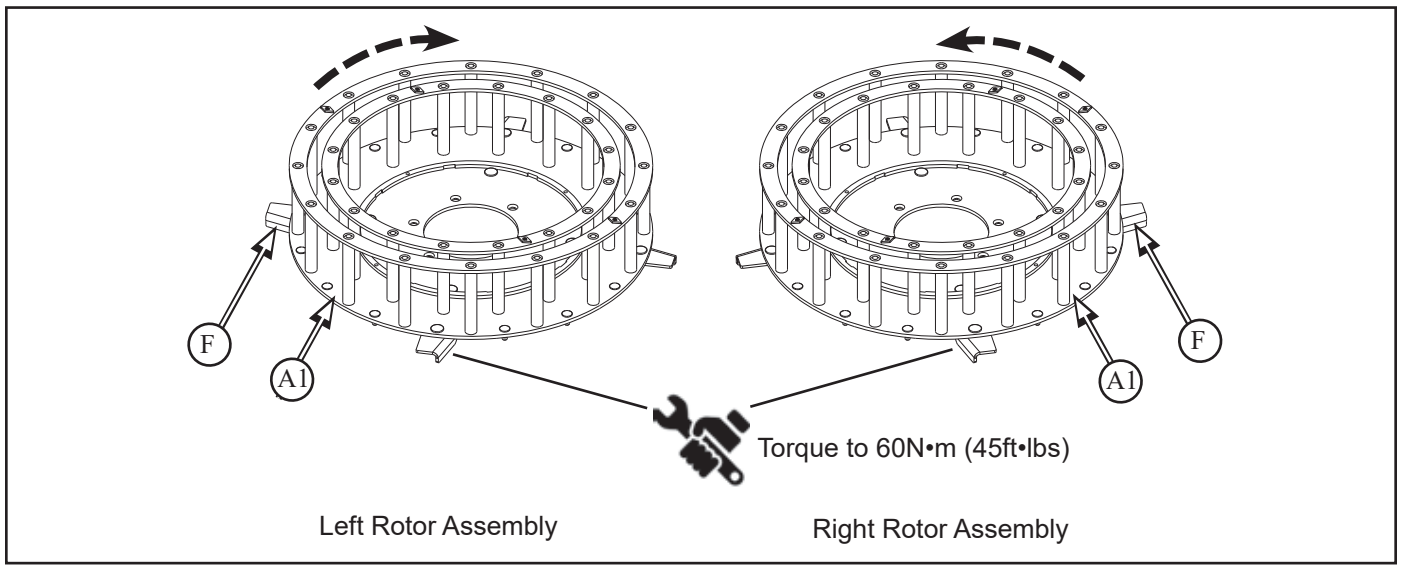
Worn out rotor from left side moved to be used as the right rotor

If coating has worn out and the structural integrity is intact, the rotors can be switched to the opposite side. All blades will have to be reinstalled with correct orientation of rotation

Assemble scraper blades (**F**) x4 to bottom of rotors (**A1**) x2
- torque to 60N*m (45 ft*lbs)

Note orientation of coating on rotor bars - ensure coating is facing direction of rotation.

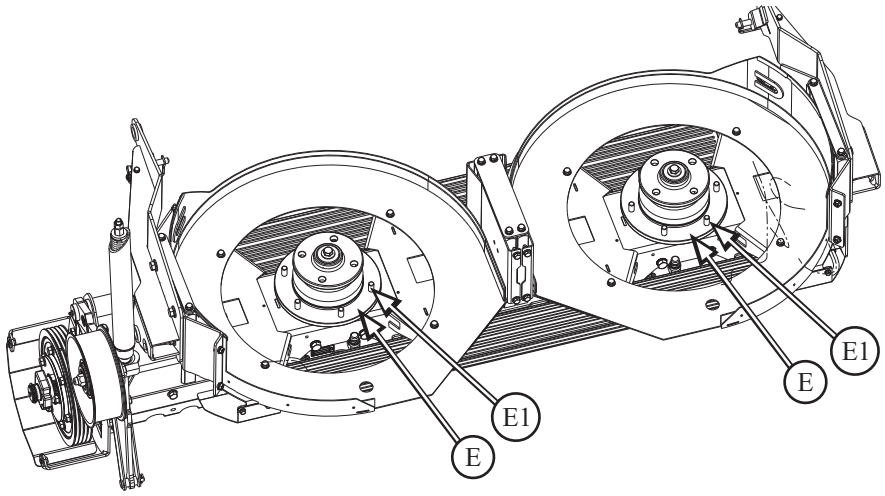
Note orientation of paddle on blades for each rotor if replacing



Left Rotor Assembly

Right Rotor Assembly

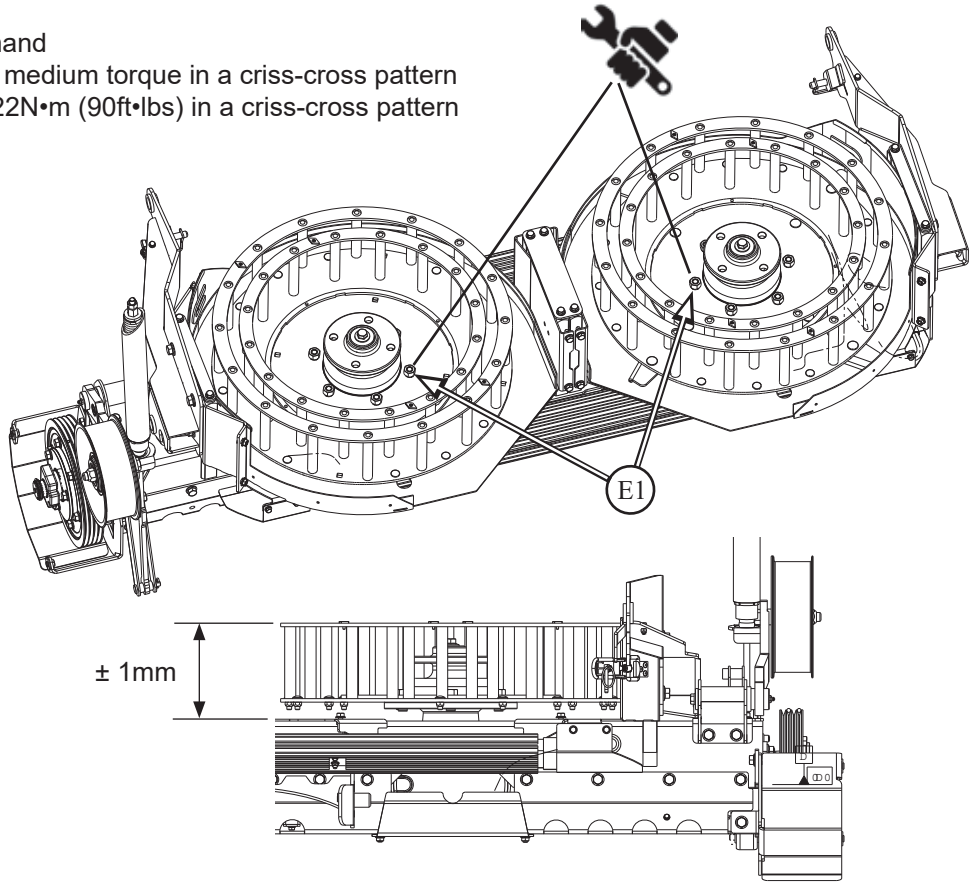
Reinstallation of rotor assemblies (**A**)
- Clean bottom of rotor and top surface of hub mounting surface (**E**)



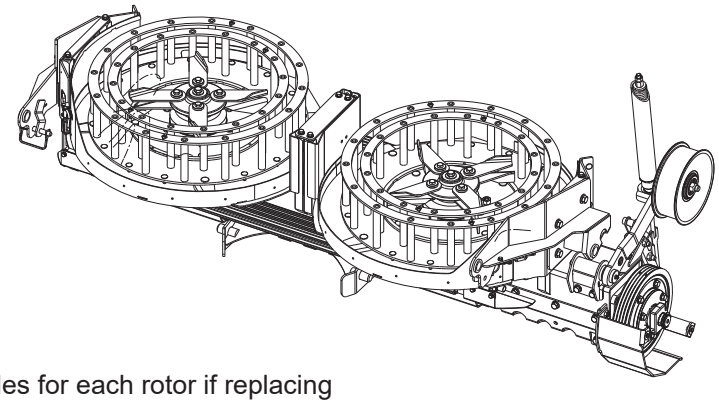
Place rotor assembly (**A**) onto hub (**E**). Ensure rotor is sitting flat on the hub

Attach rotor to hub mounting bolts (**E1**) x6 - torque to 122 N*m (90 ft*lb)
- measure top of rotor to surface of bottom frame plate
- rotate rotor 1/4 turn and measure again
- repeat 2 more times
- all measurements should be within 1mm of each other
  - if not, remove rotor and ensure all surfaces are clean
- reattach rotor, repeat measuements

Tighten all nuts by hand
Tighten all nuts to a medium torque in a criss-cross pattern
Torque all nuts to 122N•m (90ft•lbs) in a criss-cross pattern

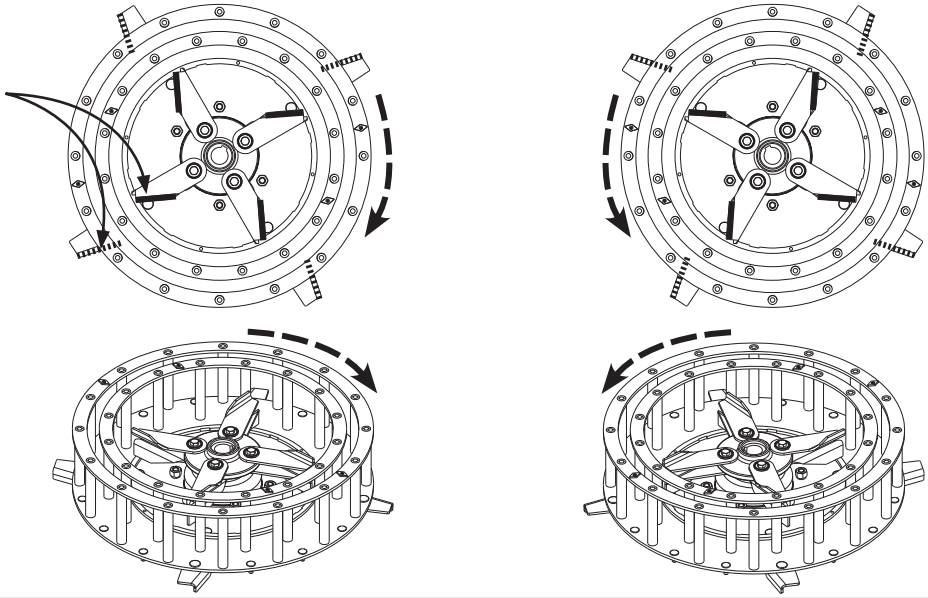


Reattach fan blades to hub



Note orientation of fan blades for each rotor if replacing

Note orientation of paddle on fan blades (**L**)



Left Rotor

Right Rotor

Fan Blades and Hardware:

Torque to 60N•m (45ft•lbs)

M10x55 Bolt

Bushing

Fan Blade

Bushing

Torque bolts to 60 N*m (45 ft-lbs)

Ensure blades rotate freely

Bushing

Fan Blade

Bushing

M10 Nut

**** ENSURE BLADE ORIENTATION MATCHES ALL BLADES IN ASSEMBLY WHEN COMPLETE ****

4 TROUBLESHOOT

5.1 Are your drive belts slipping?
Make sure the drive sheaves are aligned and check the tension of your belt. The end of the spring must align with the indicator. If the belts are too loose you'll get insufficient traction and wear the belts; if the belts are too tight there will be excess wear on the belt and on the sheave; check for sheave wear. If the sheaves are aligned and the belts are not worn, check for wear on the sheave as the next possibility.

5.2 Is there chaff / grain embedded in the drive belt?
Determine where the chaff is coming from and redirect chaff flow away from the belt.

5.3 Chaff plugging in inlet?
Check fan blade wear. If fan blade is worn, suction and airflow through the mill will be reduced.

5.4 Gearbox is hot.
Check oil level - ensure level is in middle of sight gage.
Check oil is circulating - check suction strainer screen at pump inlet.
Check that correct oil has been used - Synthetic 75W90 GL4/5
Check that coolers are clean. If static buildup, add static discharge chain to SCU.

5.5 Can the stator rings be reused?
The stators are designed to wear on only one side for each rotor - left or right. If the stator hardening coat has worn out and the material has not worn out or through, the stator then can be reused on the opposite side. If the stator material has worn through, the structural integrity will be damaged and cannot be rused - use a new stator.

5.6 Green crop residue is plugging in the mill.
Check scrapers on top of rotor ring and fan blades on bottom of rotor - replace if worn.

5.7 Monitor system errors?
Low battery or alternator voltage - recharge battery

5.8 Monitor is blank/grey
Ensure that the 12 volt auxillary power plug is plugged into the combine 12 volt socket.
Ensure the toggle switch on tablet harness adapter box is on and LED light is lit

5.9 Inlet hoppers are plugging.
- Ensure the corn door is in small grains position to allow the straw to go through the chopper. See 2.2.2.1
- Ensure discharge beaters are throwing straw beyond chaff divider panel.
    - Adjust discharge beater pan higher if possible.

5 WARRANTY

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

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

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

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

This Warranty is effective only for the original purchaser.

Redekop Manufacturing 2014
Saskatoon, SK Canada

Activate your warranty.

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

Seed Control Unit (SCU)		
Conditions		Warrantability
6. Rotor & Stator Component Conditions		
A	Breakage due to foreign object	NOT WARRANTABLE
B	Failure due to wear - not replaced soon enough	NOT WARRANTABLE
C	Nicks on blades/bars (foreign object)	NOT WARRANTABLE
D	Uneven wear	NOT WARRANTABLE
E	Excessive wear	NOT WARRANTABLE
F	Fan blade wear	NOT WARRANTABLE
G	Scraper blade wear	NOT WARRANTABLE
7. Drive Component Conditions		
A	V Belt breakage or burn due to slippage/improper tension	NOT WARRANTABLE
B	V Belt surface cracks	NOT WARRANTABLE
C	Gear Box failure	NOT WARRANTABLE
D	Drive line between gearboxes - twisted	NOT WARRANTABLE
E	Input drive shaft wear	NOT WARRANTABLE
F	Oil pump - no longer circulates	NOT WARRANTABLE
8. Outside Visible Surface Conditions		
A	Cosmetic damage	NOT WARRANTABLE
B	Faded appearance	NOT WARRANTABLE
C	Punctures due to foreign objects	NOT WARRANTABLE
D	Paint flakes off due to improper application	WARRANTABLE
E	Discharge outlets wear	NOT WARRANTABLE
9. Electronics		
A	Harness wires break/tear	NOT WARRANTABLE
B	Harness wires separate from connectors	WARRANTABLE
C	Harness connectors break	WARRANTABLE
10. Frame and Rotor Housing		
A	Cracked/bent frame due to field damage	NOT WARRANTABLE
B	End/middle plate wear	NOT WARRANTABLE

All warranty claims must be submitted with photographs of problem, photo of serial #, photo of monitor hour meter, photo of monitor service history.

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

Warranty not provided on items due to wear

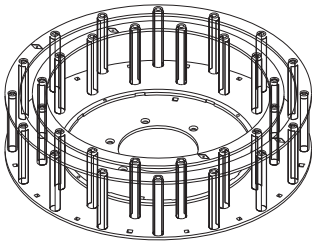
Warranty not provided on frame if driveline guards are not in place during operation

ECU software must be current, download updates on a regular basis

6 STANDARD WEAR REPLACEMENT PARTS

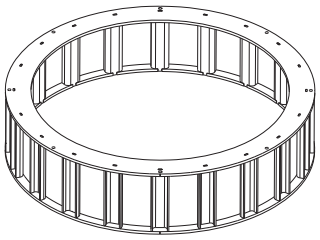
Reference Parts Manual for Part Numbers

Rotor SCU



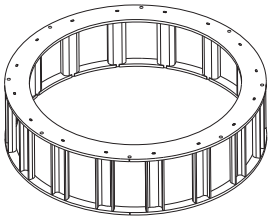
Kit Insert Stator U Bars - set of 3

- includes:
  - Stator Ring Outer - 20 U Bar



660mm Dia.

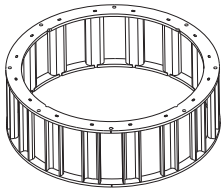
  - Stator Ring Mid - 16 U Bar



550mm Dia.

  - Stator Ring Inner - 16 U Bar

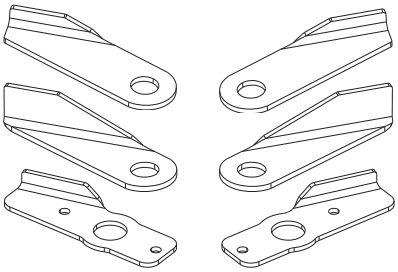
or sold seperately



445mm Dia.

Kit Blade Fan SCU

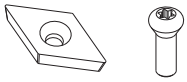
- includes:
  - .75W Fan Blade Lt & Fan Blade Rt (x4)
  - 1.5W Fan Blade Lt & Fan Blade Rt (x4)
  - Bottom Scraper Blade Lt & Bottom Scraper Blade Rt (x4)



Kit Bushing Blade SCU (32)

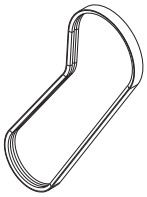
- includes:
  - Inner Bushing (16)
  - Outer Bushing (16)

Kit Scraper SCU Rotor Top (8)

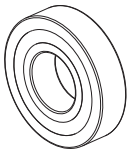


6 STANDARD WEAR REPLACEMENT PARTS

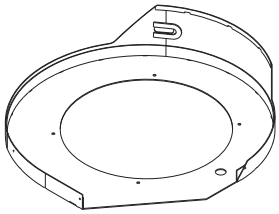
SCU Drive Belt



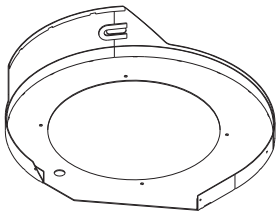
Bearing



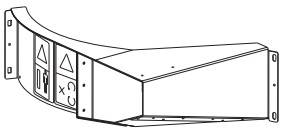
Housing Btm SCU Lt



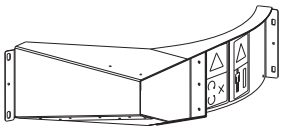
Housing Btm SCU Rt



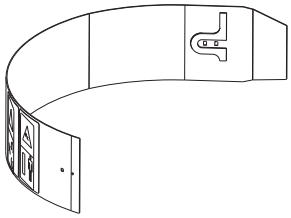
Outlet SCU Assy Lt



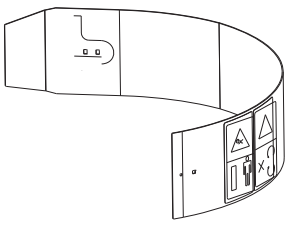
Outlet SCU Assy Rt



Cover Fr Cleanout SCU Assy Lt



Cover Fr Cleanout SCU Assy Rt



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