

Agco Fendt Ideal Removal Guide for Installation of Redekop MAV Straw Chopper

Redekop Manufacturing 2014

Saskatoon SK Canada S7K 3J7

Ph: 1.306.931.6664

1.866.REDEKOP (1.866.733.3567)

Email: info@redekopmfg.com Web: www.redekopmfg.com

Agco Fendt Ideal Factory Component Removal Guide for Installation of Redekop MAV Straw Chopper

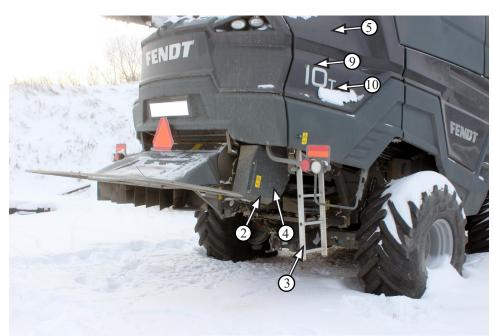
Table of Contents

	<u>Section</u>
Safety	0
Chopper Tailboard Shield Removal	1
Tailboard Guard Removal	2
Right Rear Corner Shield Removal	3
Ladder and Frame Removal	4
Drive Shield Removal	5
Drive Sheave and Tensioner Removal	6
Chaff Spreader Removal	7
Chopper Removal	8

Agco Fendt Ideal Factory Component Removal Guide for Installation of Redekop MAV Straw Chopper

Component Reference

- 1. OEM Chopper
- 2. Drive Shielding
- 3. Ladder
- 4. Drive Belt
- 5. Hydraulic Tank
- 6. Spreader
- 9. Drive Sheave
- 10. Tensioner





Supplies required to assist during the removal procedure:

Requirements:

Blocking

- 10 x 8 x 43 inches / 250 x 200 x 1100 mm
- required for section 0.13.2



Gear Puller

- required for section 2.4



Locking Mechanism

- required for section 3



Pallet

- 40 x 70 inches /1000 x 1800 mm
- required for section 4.3



0 Safety

0.1 Instructions

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

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

0.2 Recognize Safety Information

0.2.1 This is a safety-alert symbol. When you see this symbol on your 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 equipment components and repair parts include the current safety signs. Replacement safety signs are available from your dealer.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this manual.

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

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

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.

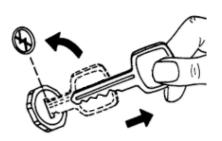
0.7 Remove Key from Ignition

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 machine.



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.

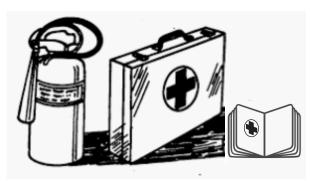


0.17 Prepare for Emergencies

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.



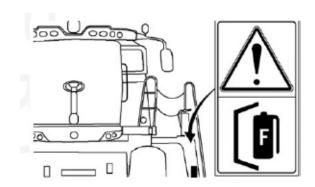
0.18 Fire Extinguisher

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, 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.



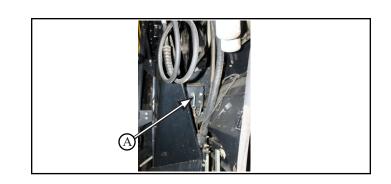
CAUTION: Do not risk personal injurty. If a fire is too far advanced, do not try to extinguish it.

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 wind to your back.
- 3. Pull the safety pin out of actuating lever.
- 4. Hold extinguisher upright and aim hose at base of flames.
- 5. Squeeze lever to discharge fire extinguisher.
- 6. Move hose to cover the source of the fire evenly with extinguishing agent.

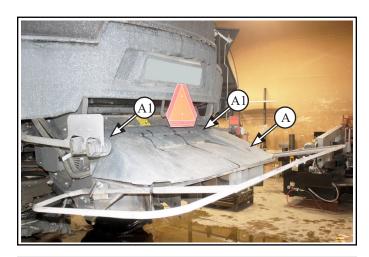


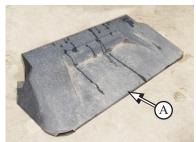
Turn Master Power Off (A)



1 Chopper Tailboard Shield Removal

- 1.1 Remove chopper tailboard shield (A)
- not to be reused
- **1.1.1** Lift and disengage from pins (A1)

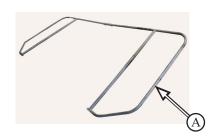


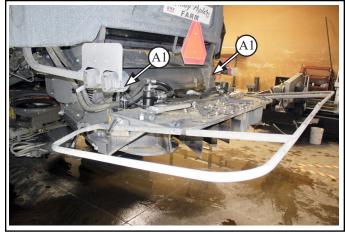




Tailboard Guard Removal

- **2.1** Remove tailboard guard (A) from rear of chopper
- 2.1.1 Disconnect handle (A1)
- both sides
- not to be reused





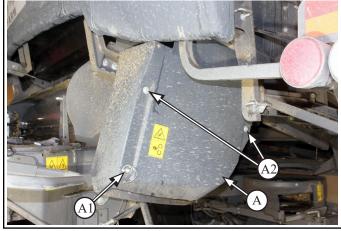


3 Right Rear Corner Shield Removal

3.1 Remove right corner shield (A)



- 3.2 Remove pin (A1) from right corner shield (A)
- **3.3** Turn quarter turn fasteners (A2) x2 from right corner shield (A)
- not to be reused



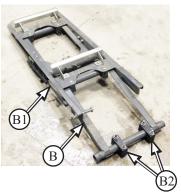


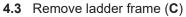


4 Ladder & Frame Removal

- 4.1 Remove ladder (A) from combine
- lift off of brackets
- 4.2 Remove ladder pivot frame (B)
- **4.2.1** Disconnect gas spring (**B1**) x2 from frame
- 4.2.2 Remove pivot pillar blocks (B2) x2

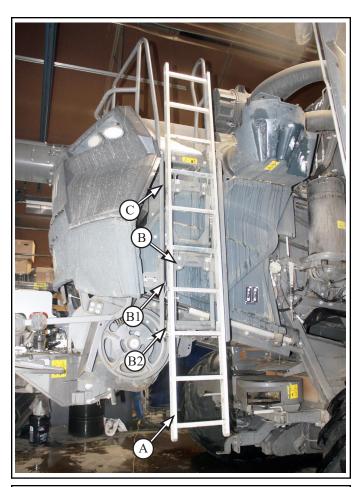


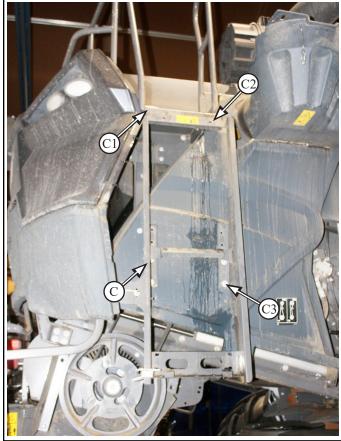




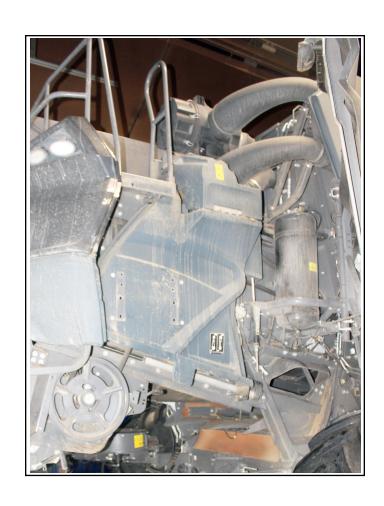
- handrail connection (C1)
- top mounting bolts (C2)
- frame bolts (C3)
- ladder frame and hardware to be reused





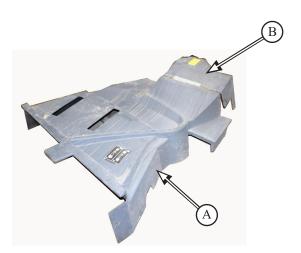


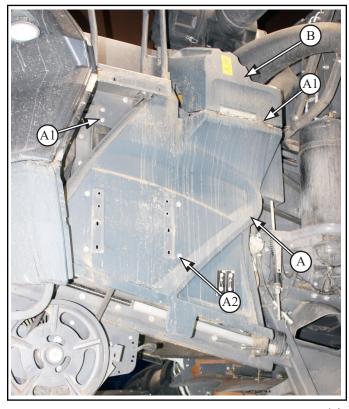
4.4 View with ladder and frame removed



Drive Shield Removal

- **5.1** Remove drive shield (A & B)
- to be reused
- **5.2** Remove top mounting hardware (A1) x4 under top step and under top pivot shield
- 5.3 Remove front hardware (A2) x4



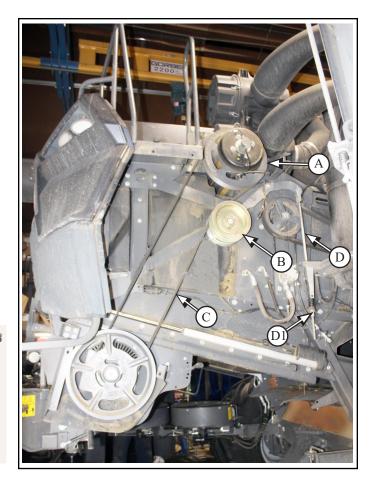


6 Drive Sheave & Tensioner Removal

NOTE:

- If SCU is to be installed, remove Drive Sheave and Tensioner as detailed below
- If SCU is not being installed at this time, skip this section
- **6.1** Loosen belt tensioner (\mathbf{B}) by loosening nuts ($\mathbf{D1}$) on tension rod assembly (\mathbf{D})
- 6.2 Remove drive belt (C)
- not to be reused
- **6.3** Remove belt tensioner rod assembly (\mathbf{D}) spring, indicator and nuts
- to be reused





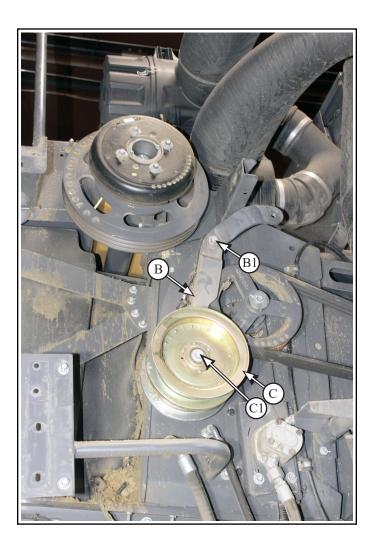
If SCU is being installed:

- **6.4.1** Remove belt tensioner assembly (B)
- remove mounting bolt (B1)
- not to be reused
- hardware to be reused



If SCU is not being installed:

- **6.4.2** With belt tensioner assembly (**B**) remaining in place on combine side wall, remove belt tensioner pulleys (**C**) from arm
- remove mounting bolt (C1)
- pulleys not to be reused
- hardware to be reused

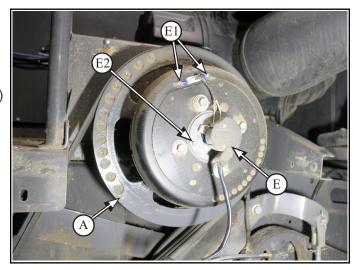


If Equipped with Chopper Drive Clutch:

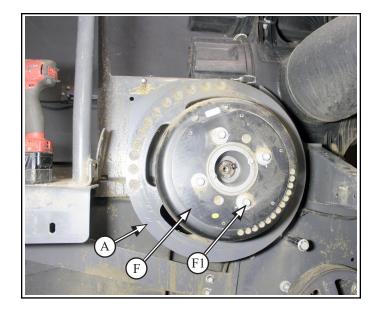
If not equipped with chopper drive clutch, skip to section 6.7

- **6.5** Remove electrical assembly (**E**) from drive sheave (**A**) to be reused
- **6.5.1** Disconnect electrical connectors (E1)
- **6.5.2** Remove mounting hardware (**E2**)
- to be reused

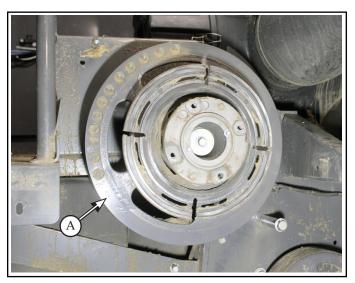




- **6.6** Remove clutch cover and shim plates (**F**) from drive sheave (A)
- remove mounting hardware (F1) x4
 clutch cover, shim plates and hardware to be reused



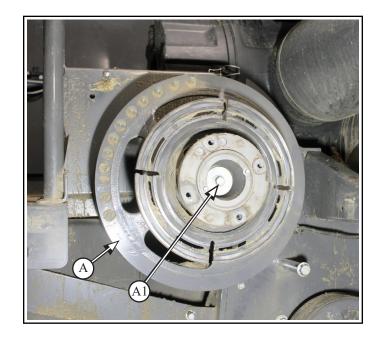




6.7 Remove drive sheave (A)

6.7.1 Remove sheave mounting bolt and washer (A1) from drive sheave (A)

- to be reused

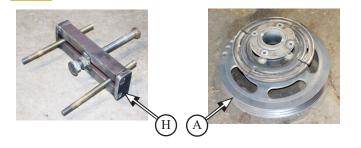


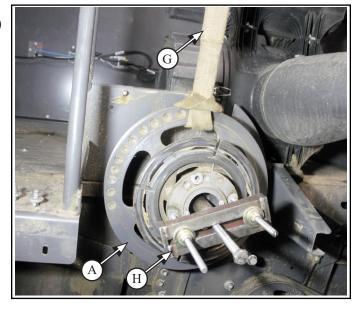
6.7.2



Secure sheave with an overhead strap (G)

6.7.3 Remove drive sheave (A) using a gear puller (H)- do not use a gear puller that pulls on the flanges or ribs

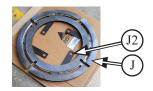


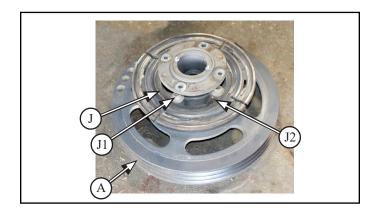


If Equipped with Chopper Drive Clutch:

If not equipped with chopper drive clutch, skip to section 6.7.5

- **6.7.4** Remove clutch plate (**J**) from drive sheave (**A**)
- to remove, rotate tabs $(\mathbf{J2})$ as required to provide clearance
- clutch plate (J) to be reused
- hardware (**J1**) x4 to be reused
- drive sheave (A) will not be reused

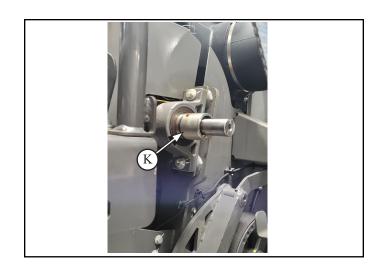




$\mathbf{6.7.5}$ Remove drive sheave spacer (\mathbf{K})

- not to be reused

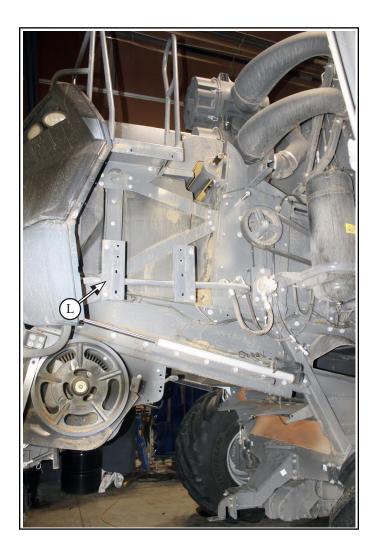




6.7.6 View with drive sheave and tensioner removed

Note: Ladder mounting frame (\mathbf{L}) to remain in place if no SCU is being installed at this time.

If a SCU is being installed, the ladder mounting frame will be removed in section 8.4 and replaced with a new ladder mounting frame with the installation of the new chopper and SCU



7 Chaff Spreader Removal

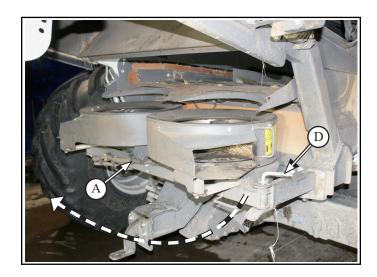
- **7.1** Disconnect electrical connector (**B**)
- **7.1.1** Disconnect wire ties **(B1)** to free up harness to spreader
- 7.2 Disconnect hydraulic hoses at couplers (C)



7.2.1 Seal ends of hydraulic lines with plastic wrap (C1) to keep lines clean



- 7.1 Remove locking pin (D)
- 7.2 Pivot chaff spreader (A) out



7.3

Support chaff spreader with an overhead strap (E) and underneath with a table (F) or forklift and pallet.

Chaff spreader is rearward heavy and will pivot if only supported on beam



7.4 Remove pivot pin (A1)

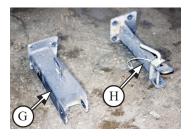
7.5 Remove chaff spreader (A)

- not to be reused

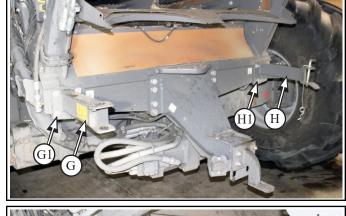


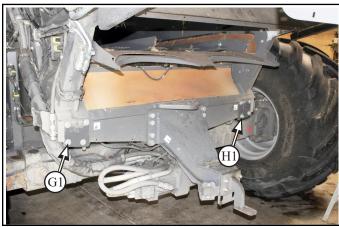


- 7.6 Remove chaff spreader support arms (G & H)
- reinstall hardware (G1 & H1) back into holes
- arms not to be reused



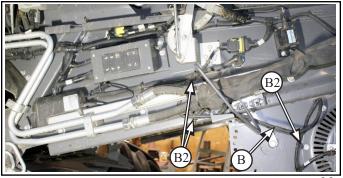
7.7 View with chaff spreader removed











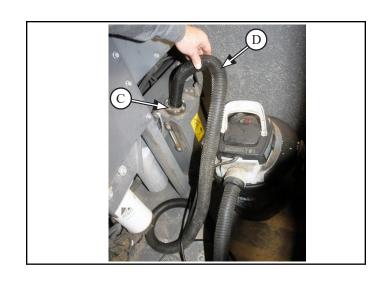
8 Chopper Removal

Parts List:

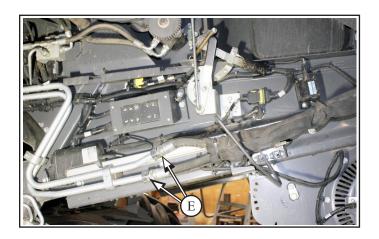
HH151 Hose Hyd 1 x 38L 16 MORFS (**F**) Qty 1 H33-1616FFX Fit Hyd 45 deg 16 MORFS x 16 FORFS swivel (**G**) Qty 1

- **8.1** Remove harness (**B**) from chopper and tailboard to be reused
- **8.1.1** Disconnect electrical connectors (**B1**) on chopper and tailboards
- **8.1.2** Disconnect all wire ties (**B2**) to free up harness to chopper

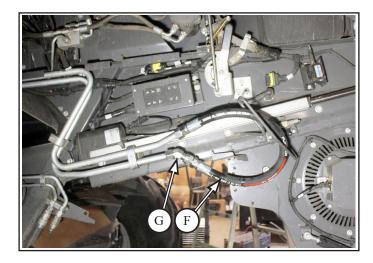
- **8.2** Hydraulic hose line modifications
- **8.2.1** Apply a vaccum hose (\mathbf{D}) to hydraulic tank filler tube (\mathbf{C}) on upper platform



8.2.3 With vaccum (**D**) running on Suction mode, disconnect hydrualic lines (**E**) from steel hydraulic lines



- **8.2.4** With vaccum (**D**) running on Suction mode, install:
- new hydraulic fitting (G) to steel line
- new hydraulic line (F) to steel lines to create a loop

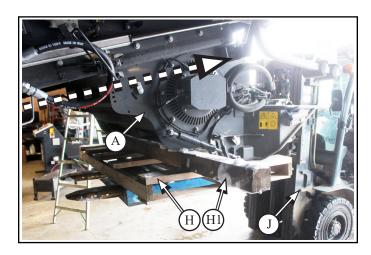


- 8.3 Chopper removal
- 8.3.1 Switch main power back on
- **8.3.2** Move chopper (A) all the way rearward

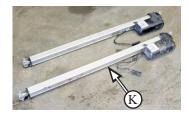


This component weighs
500 lbs / 230 kg
Use a forklift with appropriate
capacity

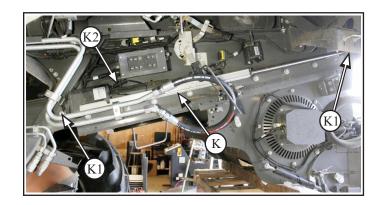
- **8.3.3.1** Place a pallet (**H**) underneath the chopper with a forklift (**J**)
- **8.3.3.2** Place blocking (**H1**) under chopper to prevent chopper from moving once removed from combine



- **8.3.4** Remove actuator (**K**) from chopper (**A**)
- remove mounting hardware (K1)
 - to be reused
- actuators to be reinstalled
- 8.3.4.1 Retract actuator (K)
- **8.3.4.2** Disconnect electrical connectors (**K2**) from combine
- 8.3.4.3 Repeat for other side



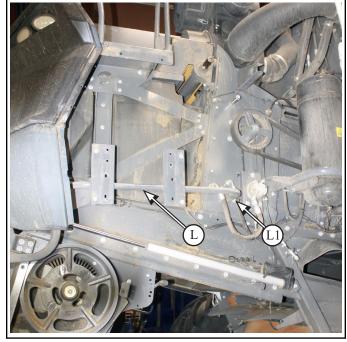
8.3.5 Switch main power back off



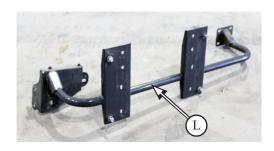
8.4 Ladder Mount Frame (L) removal

NOTE:

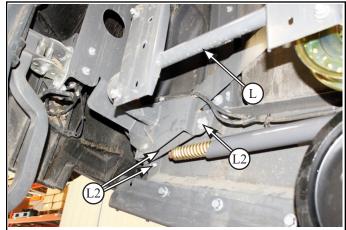
- If SCU is to be installed, remove Ladder mount frame as detailed below
- If SCU is not being installed at this time, skip to section $8.5\,$
- **8.4.1** Remove front mounting hardware (**L1**) x4 to be reused



8.4.2 Remove rear mounting hardware (**L2**) x3 - not to be reused



8.4.3 View with drive shield and ladder mount frame removed



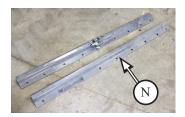


8.5 Remove all chopper mounting hardware (A1) along rail (\mathbf{K})



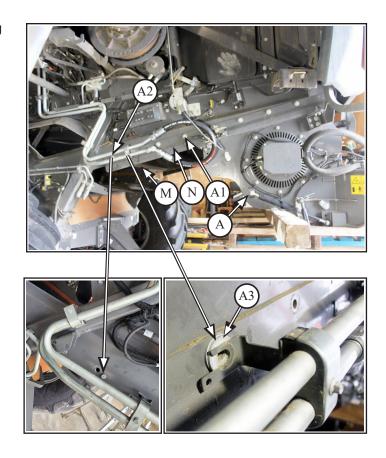
- support divider panel (**M**) upon removal of bolt (**A2**) to prevent it from swinging down hard

- both sides
- watch for any spacers (A3) used
- hardware to be reused
- slide rails (\mathbf{N}) to be reinstalled

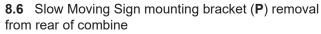




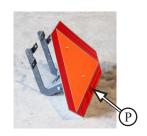
8.5.1 View with chopper removed

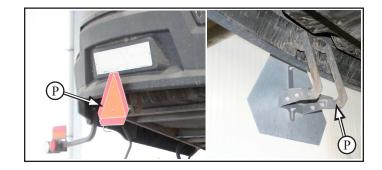




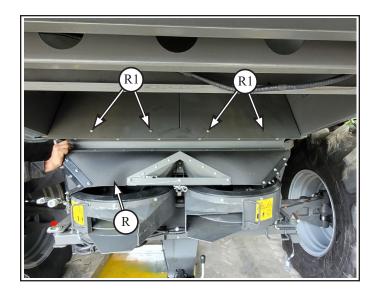


- to be reinstalled

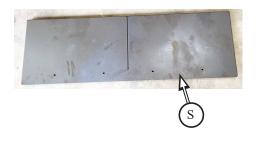




- 8.7 Spreader Chaff Guide (R) removal
- 8.7.1 Remove mounting hardware (R1) x4
- spreader chaff guide and hardware not to be reused

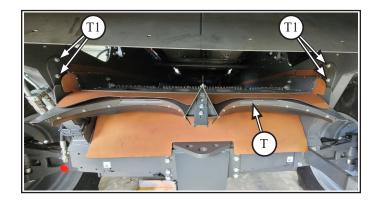


- 8.8 Material Divider Panel (S) removal
- **8.8.1** Remove mounting hardware (**S1**) x4 divider panel and hardware not to be reused



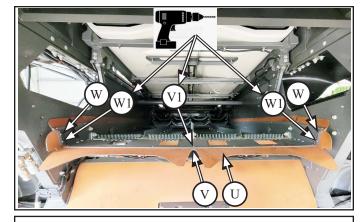


- **8.9** OEM Sieve Extension (T) removal
- 8.9.1 Remove mounting hardware (T1) x4
- sieve extenstion not to be reused
- hardware to be reused



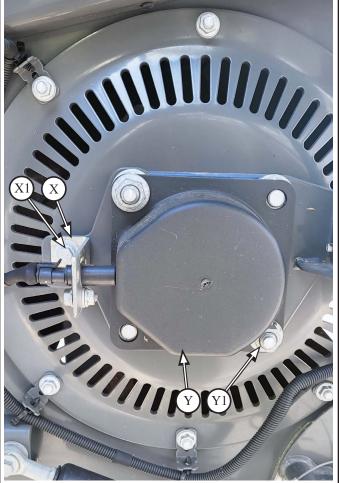
8.10 Remove OEM Sieve Belting (U)

- 8.10.1 Drill out all rivets (V1 & W1) along top and sides
- straps (bottom (V) x1, sides (W) x2) to be reused
- belting (U) not to be reused



8.11 Speed Sensor and Target removal

- **8.11.1** Remove speed sensor mounting bracket (X) mounting bolt (X1) from OEM chopper
- speed sensor and mounting bracket to be reused
- **8.11.2** Remove shield (Y) mounting hardware (Y1) not to be reused



8.11.3 Remove speed sensor target (\mathbf{Z}) mounting bolt ($\mathbf{Z1}$) from OEM chopper shaft

- to be reused

