



MAV - 220 (SCU Ready)  
Case IH AFX 230, 240 & 250 Series  
Model Year 2023 (MY23)  
Field Chopper Installation Guide

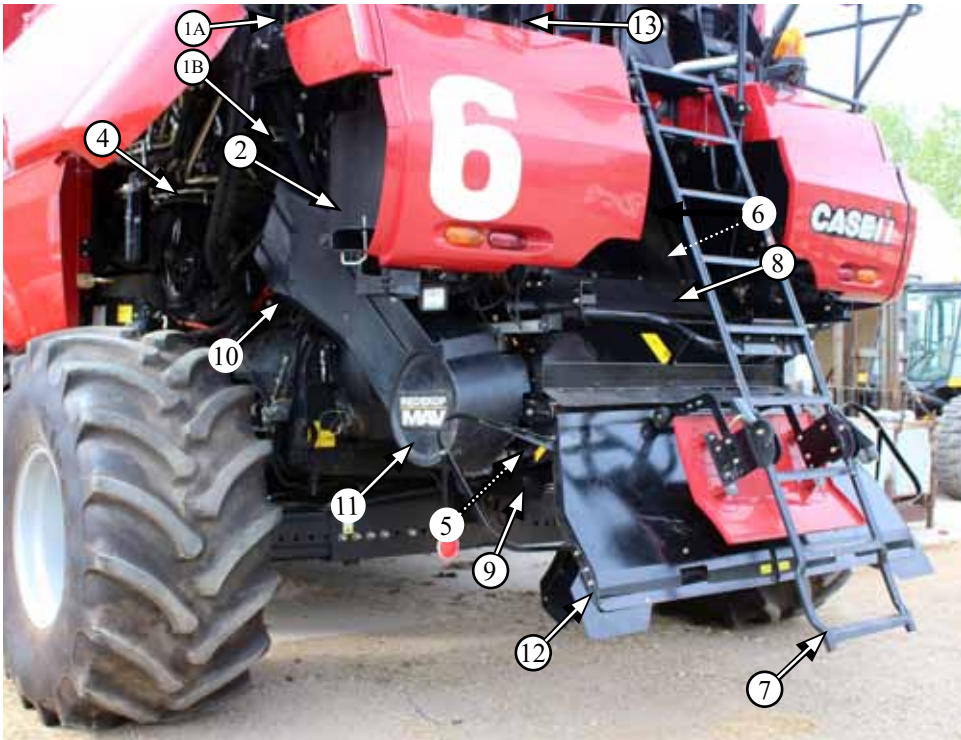


**Case IH AFX 230, 240 & 250 Series**  
**Complete Redekop MAV Chopper Installation Manual - MY23**  
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**Case IH AFX 230, 240 & 250 Series**  
**Complete Redekop MAV Chopper Installation Manual - MY23**  
**Component Reference**

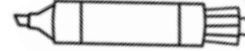
- 1A. Air Tank - 240S
- 1B. Air Tank - 230S
- 2. DEF Tank
- 4. Hydraulic Lines
- 5. Sieve Extension
- 6. Chaff Deflectors
- 7. AFX Ladder
- 8. Straw Door
- 9. Chopper
- 10. Chopper Drive - Jackshaft
- 11. Drive Shields
- 12. Tailboard
- 13. Hydraulic Oil Level



# Supplies required to assist during the installation procedure:

## Requirements:

### Marker



### Drill

Drill bit - 10mm dia or 13/32 in dia.  
- required for section 3.9.4



Drill bit - 12mm dia or 1/2 in dia.  
- required for section 3.1.4



### Pipe Sealant Tape

- required for section 1.4



### LH Side Fuel Tank Removal parts - 9240 only

required for 9240, section 2.6

- 201-913 Plug, Hex, ORFS 1-14 5/8 Tube Qty 1
- 273916 Plug, ORB 1-5/16-12 1.0 Tube Qty 1

Required parts will have to be ordered through Case IH Parts system

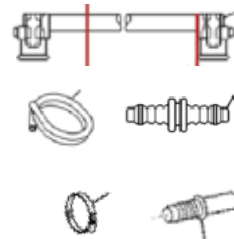


### DEF parts

required for 240 Series, section 3.7

- 47777353 DEF Line w/ SV246 NG8 Elbow Connector Qty 2
- 47777447 Barbed Connector for DEF Line Qty 4
- 84480613 EPDN Hose 40" Qty 2
- 84480601 Hose Connector for coolant line Qty 4
- 86625022 Hose Clamp Qty 4
- 47655259 Tool Box Qty 1

Required parts will have to be ordered through Case IH Parts system



### Decal

- required for section 3.6

- #47692590A Qty 1

Order from Case IH Parts system



### Laser Alignment Tool

Order RP956 if Required

- required for section 10.2.4



# 0 Safety

## 0.1 Introduction

**0.1.1** IMPORTANT: Read through this instruction 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 Spreader 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 machine 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 operator's 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 machine life.

If you do not understand any part of this manual and need assistance, contact your dealer.

Other languages are available for this machine. Please contact Redekop



## 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.

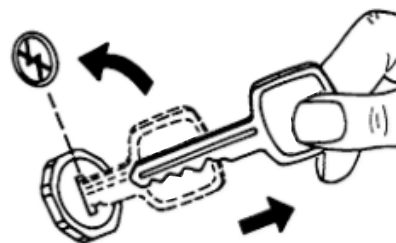


## 0.7 Remove Key from Ignition

**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.

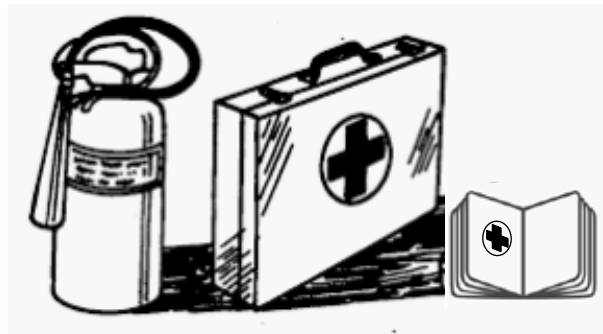


## 0.17 Prepare for Emergencies

**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.



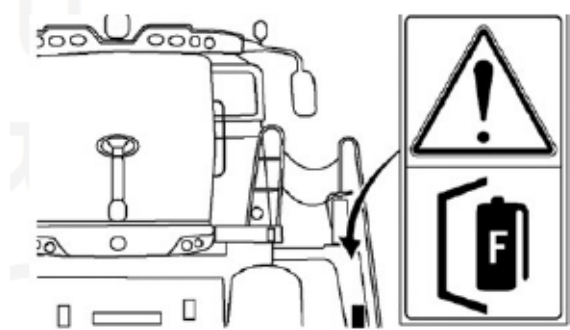
## 0.18 Fire Extinguisher

**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 extinguisher's manual for instructions on how to operate it. Once extinguisher is operated - no matter how long - it must be recharged.

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



## 0.19 Remove Accumulated Crop Debris

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



## 0.20 In the Event of Fire

**0.20.1** Stop work immediately at first sign of fire. This may be the smell of smoke or the sight of smoke or flames.



**CAUTION: Do not risk personal injury. 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 guidelines:

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.

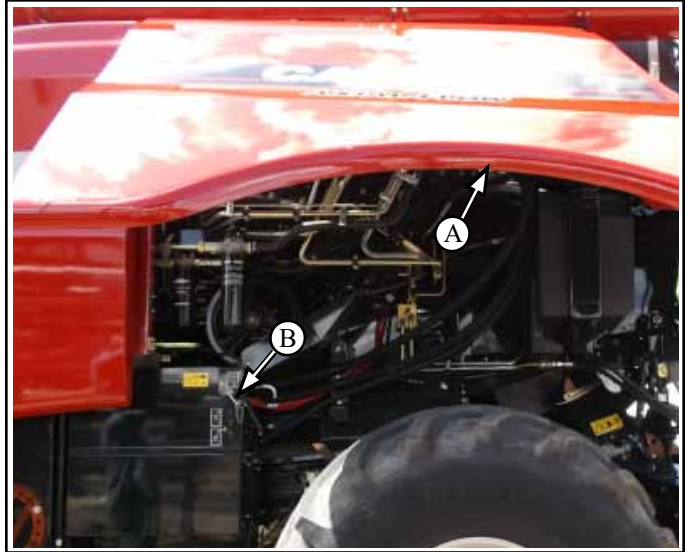


Torque Table		
Nominal Size	Class 8.8	Class 10.9
	Nm / (ft-lbs)	Nm / (ft-lbs)
<b>M8 - flanged</b>	<b>27 / (20)</b>	<b>39 / (29)</b>
<b>- non flanged</b>	<b>25 / (18)</b>	<b>35 / (26)</b>
<b>M10 - flanged</b>	<b>54 / (40)</b>	<b>57 / (42)</b>
<b>- non flanged</b>	<b>49 / (36)</b>	<b>70 / (51)</b>
<b>M12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



# Master Power

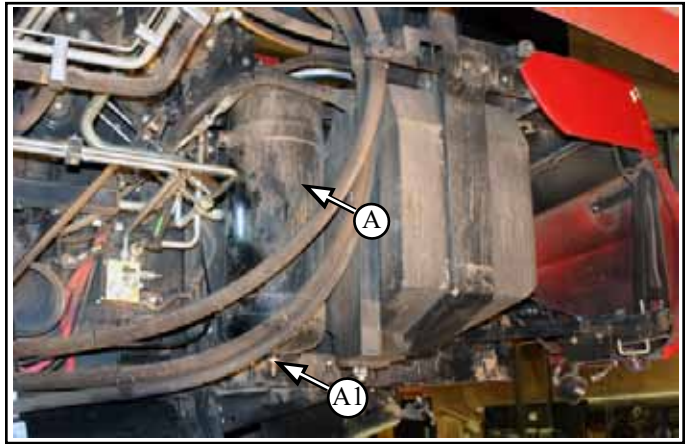
1. Shut off engine, remove keys from the combine cab
2. Block wheels on level ground
3. Lift up the left rear side access panel (A)
4. Turn Master Power Off (B)



## 1 Air Tank Removal / Relocation - if equipped - 230 Series only

### 1.1 Drain Air Tank

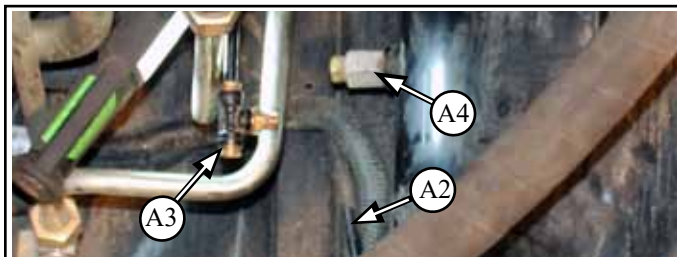
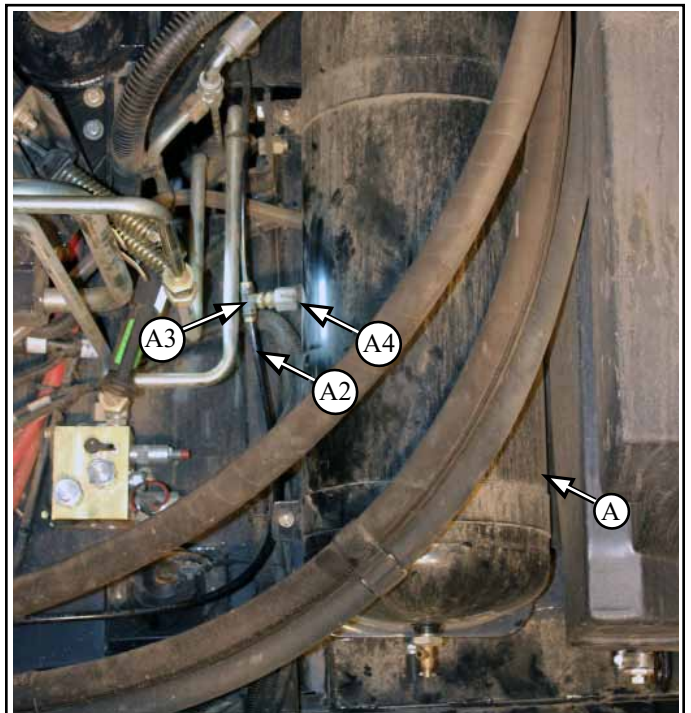
- 1.1.1 Open bottom valve (A1) on air tank (A) to release air pressure



### 1.2 Disconnect Air Line

- 1.2.1 Remove bottom air line (A2) from Tee fitting (A3)

- 1.2.2 Disconnect Tee fitting (A3) from fitting (A4) on air tank (A)

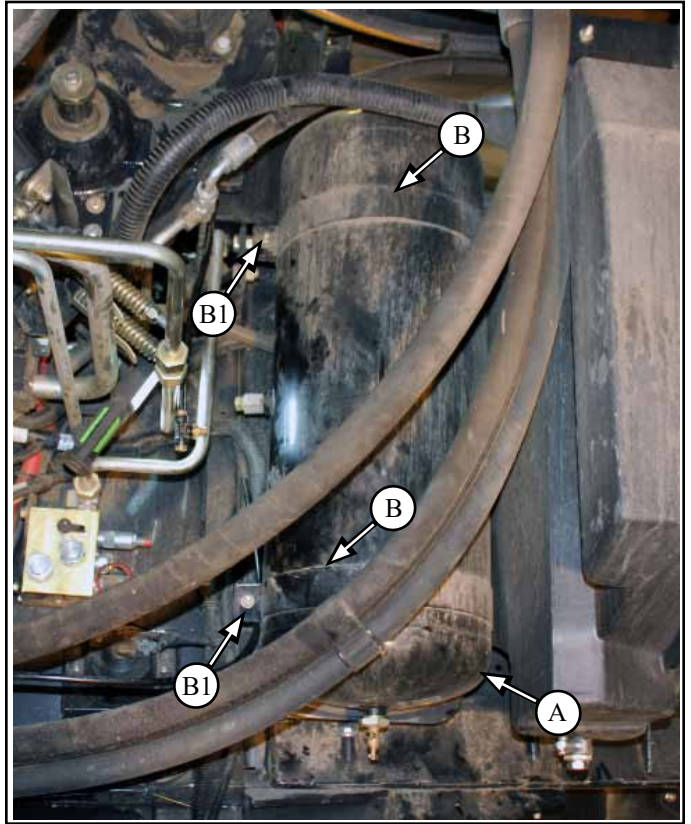


### 1.3 Remove Air Tank

1.3.1 Remove hardware (B1) from air tank straps (B) x2 holding the air tank (A) in place

1.3.1.1 Remove air tank (A)

- to be reinstalled at a different location



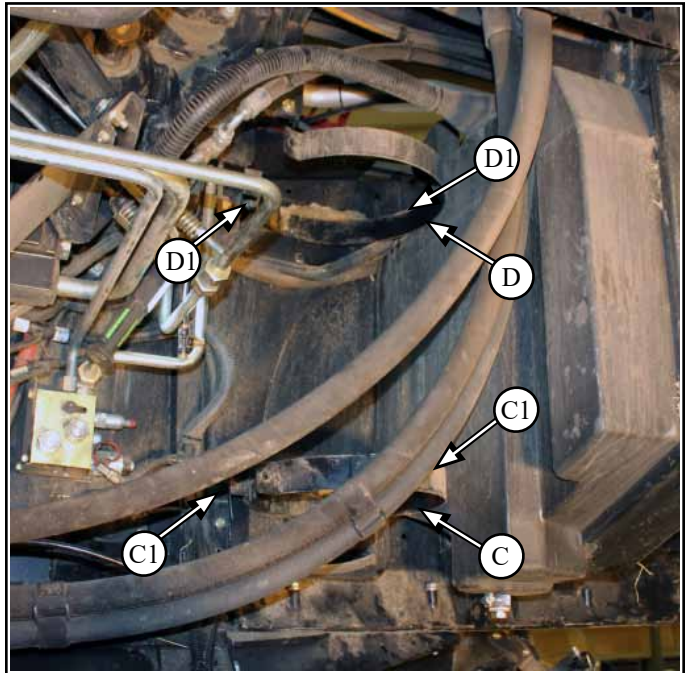
1.3.2 Remove hardware (C1) x2 mounting the bottom air tank mounting bracket (C) to combine wall

- hardware not to be reused



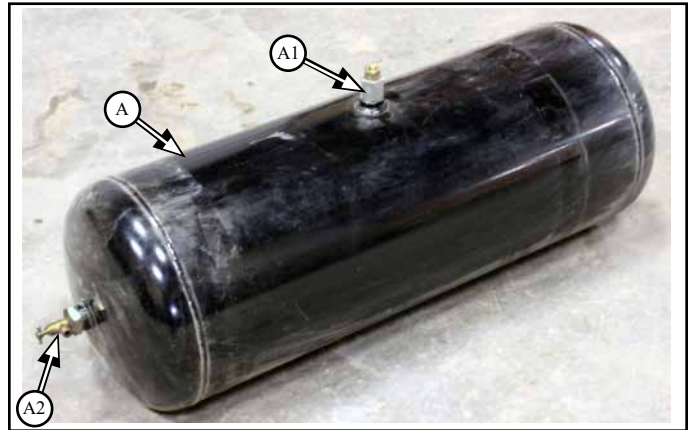
1.3.3 Remove hardware (D1) x2 mounting the top air tank mounting bracket (D) to combine wall

- hardware not to be reused

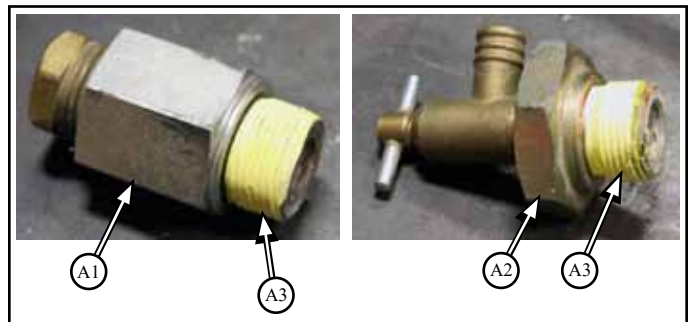


## 1.4 Air Fitting Relocation

1.4.1 Remove existing fittings (A1 & A2) from air tank (A)

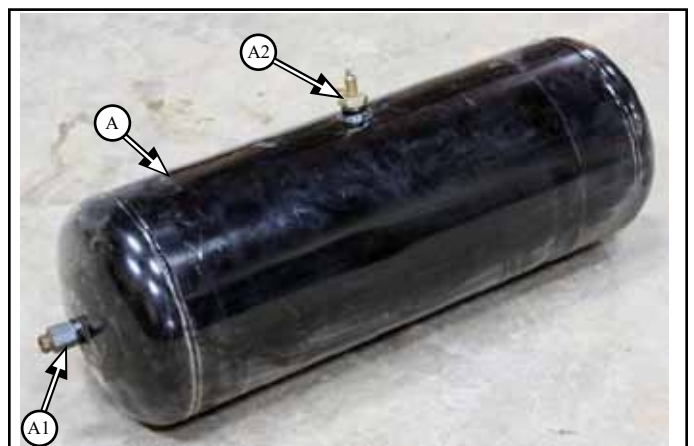


1.4.2 Apply sealant tape (A3) to ends of fittings (A1 & A2)



1.4.3 Reinstall fitting (A1) into end of air tank (A)

1.4.4 Reinstall fitting (A2) into body of air tank (A)

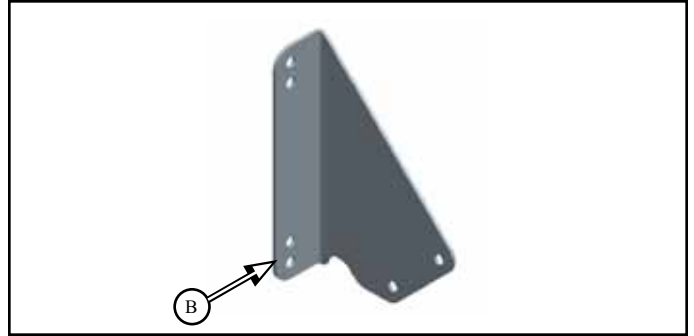


## 1.5 Air Tank Mount Bracket Installation

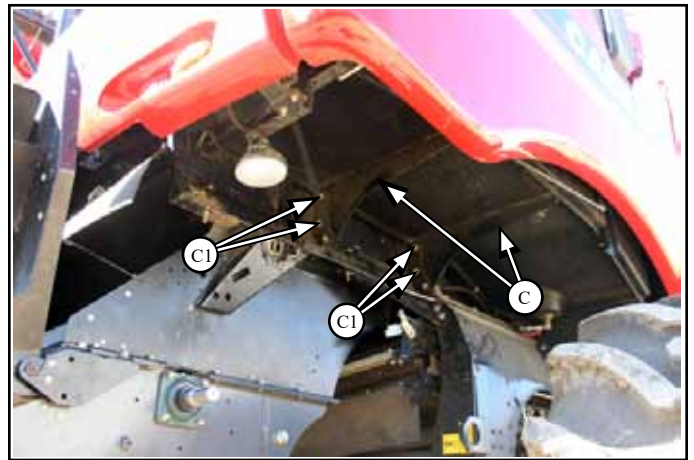
### Parts List:

parts located in CS1135BS box  
hardware located in CS510S bag

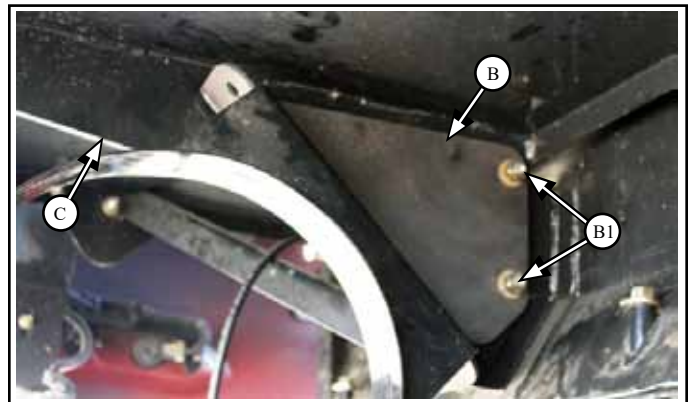
CS862B      Air Tank Mount Bracket **(B)**      Qty 2



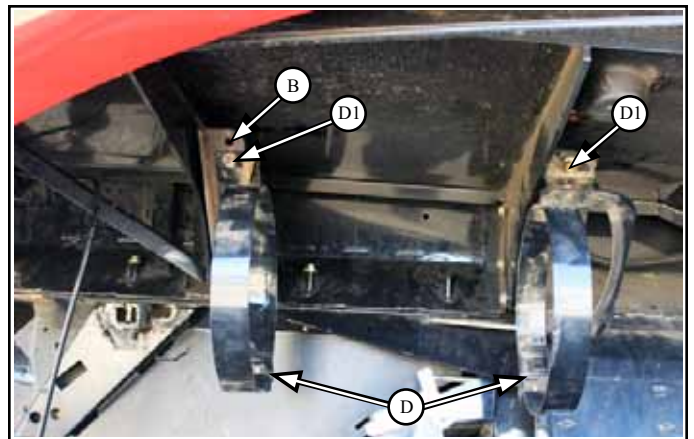
**1.5.1** At right rear corner of combine, remove upper hardware **(C1)** x2 mounting brace **(C)** x2 to combine wall - to be reinstalled in step 1.5.3



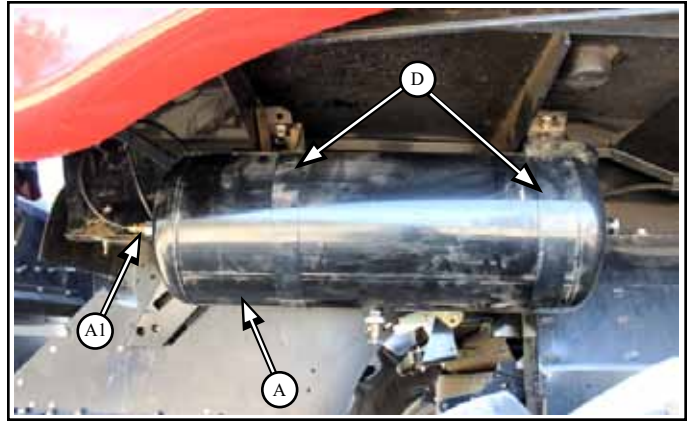
**1.5.2** Mount new air tank mount bracket **(B)** x2 to front side of mounting braces **(C)** with:  
- M12 x 25 flanged head bolts and flange nuts **(B1)** x4



**1.5.3** Mount existing air tank mount bracket **(D)** x2 to mounting brackets **(B)** with:  
- existing M12 x 20 flanged head bolts and flange nuts **(D1)** x4 from step 1.5.1



**1.5.4** Mount air tank (A) into mounting brackets (D)  
 - ensure end with fitting (A1) is facing rearward

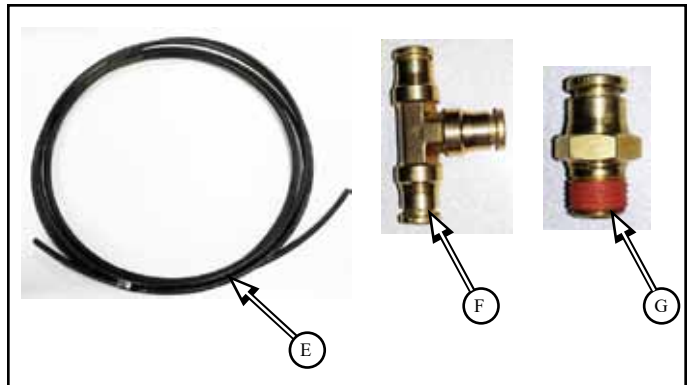


**1.6 Air Hose Installation**

**Parts List:**

parts located in CS1135BS box / CS510S bag

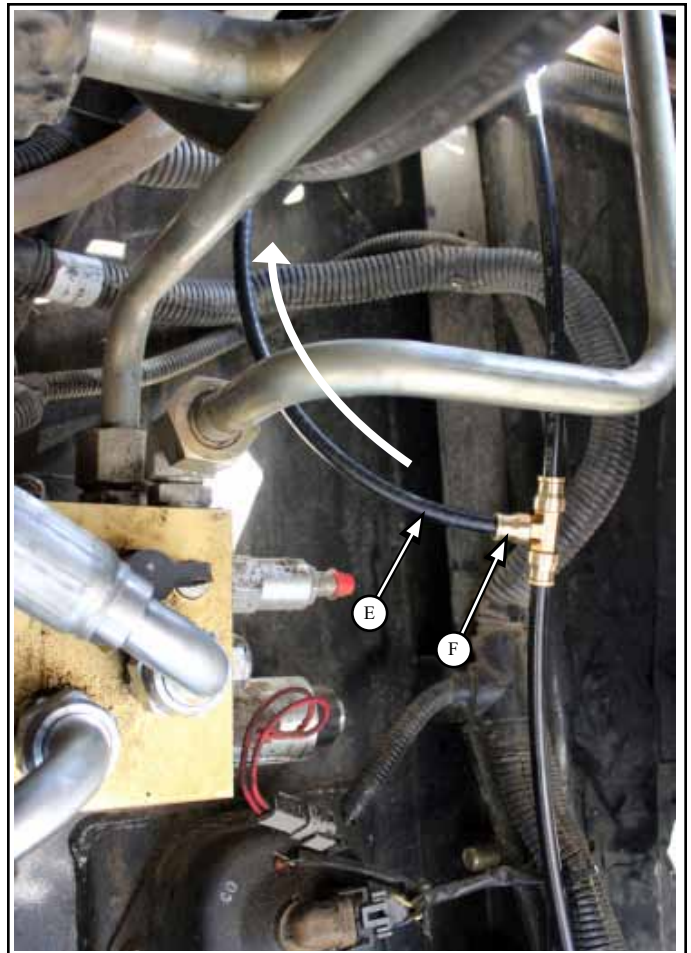
CS860-01	Air Hose 3/8 x 16ft (E)	Qty 1
RP836	Fitting Tee Air Push In .375 (F)	Qty 1
RP837	Fit Air .375 Push In .25 NPT (G)	Qty 1



**1.6.1** Replace existing air tee fitting (A3) with new tee fitting (F)

**1.6.2** Insert new air hose (E) into tee fitting (F)

**1.6.3** Run air hose (E) up under top platform over to new location of air tank (A) at right rear corner

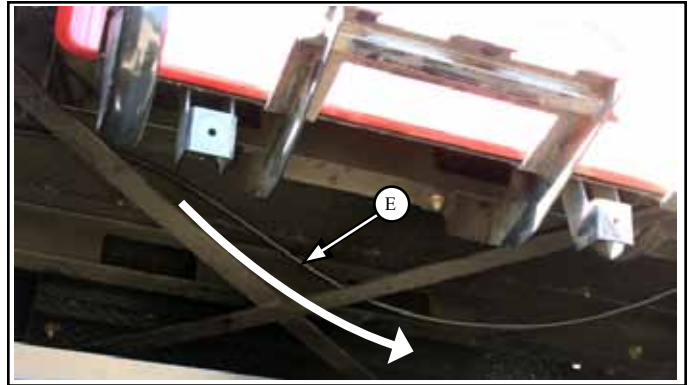


Previous

New

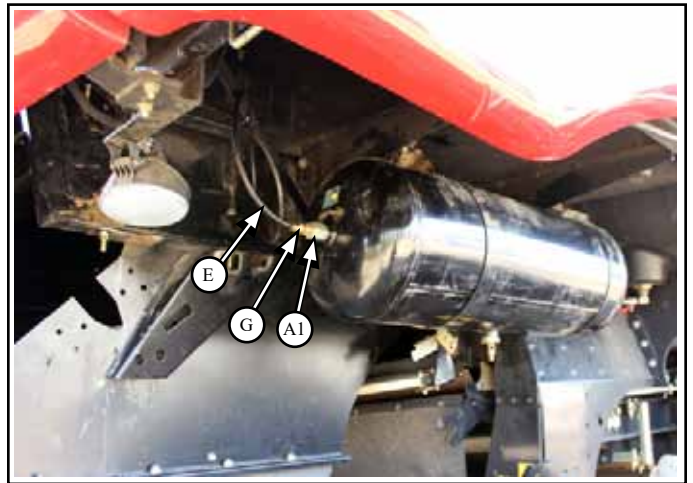


**1.6.3.1** Run air hose (E) up under top platform over to new location of air tank (A)

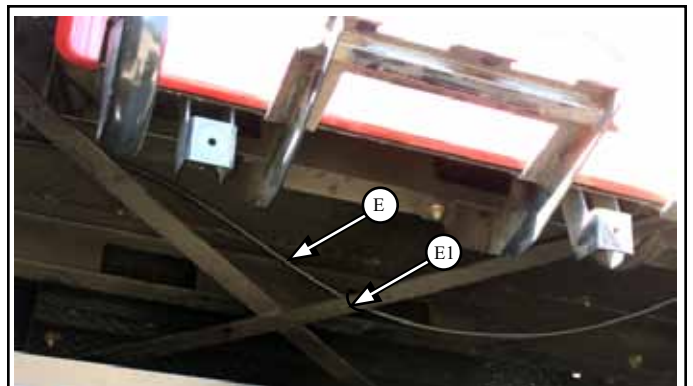


**1.6.3.2** Connect air fitting (G) to air tank fitting (A1)

**1.6.3.3** Connect air hose (E) to air fitting (G)



**1.6.4** Secure air hose (E) to combine with tie straps (E1) as required



## 2 Diesel Exhaust Fluid (DEF) Tank Relocation Preparation - 230/240 Series (Required only on applicable machines)

### 2.1 Drain DEF Tank

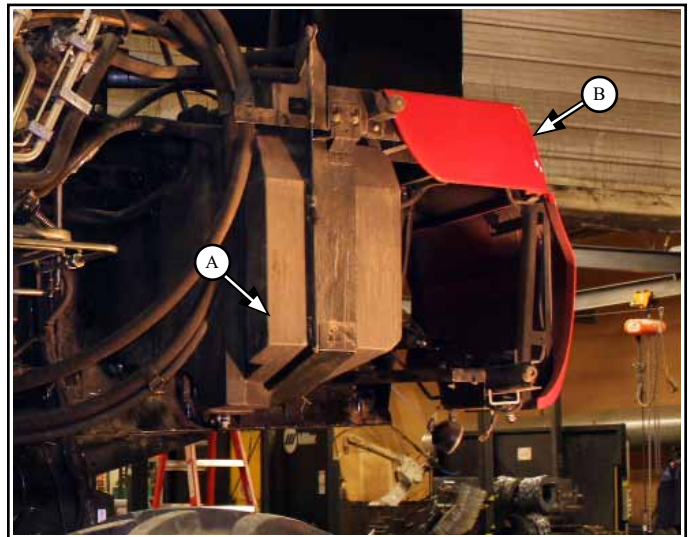
2.1.1 Open drain valve (A1) at bottom of DEF tank (A)

2.1.1.1 Drain fluid into a clean container (A2)

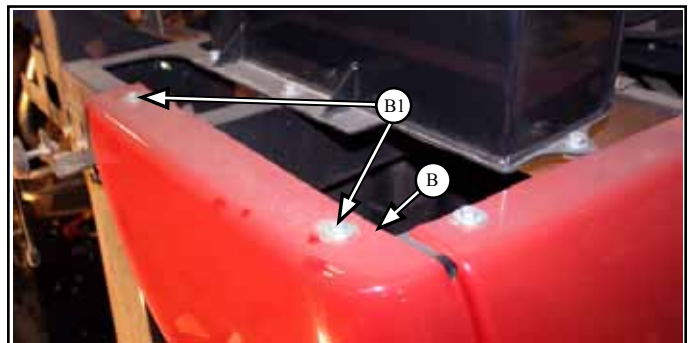


### 2.2 Remove Top Left Corner Panel

2.2.1 Remove hardware (B1) x2 mounting the top left rear corner panel (B) to the combine top frame



- to be reinstalled

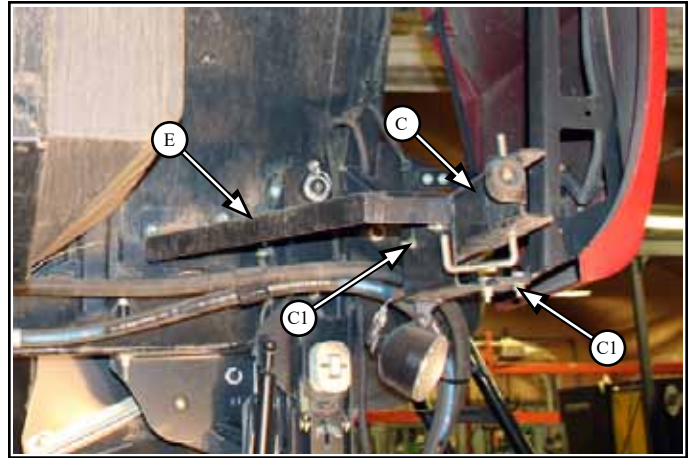
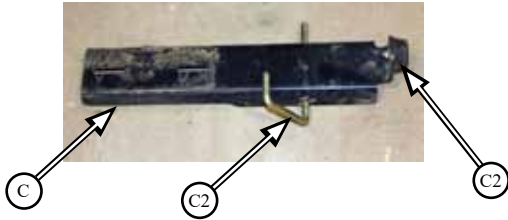


## 2.3 Remove Rear Support Arm

2.3.1 Remove hardware (C1) x4 mounting the rear support arm (C) to rear support bracket (E)

2.3.2 Remove pin, spring, rubber stop and hardware (C2)

- to be reinstalled
- bracket (C) not to be reused



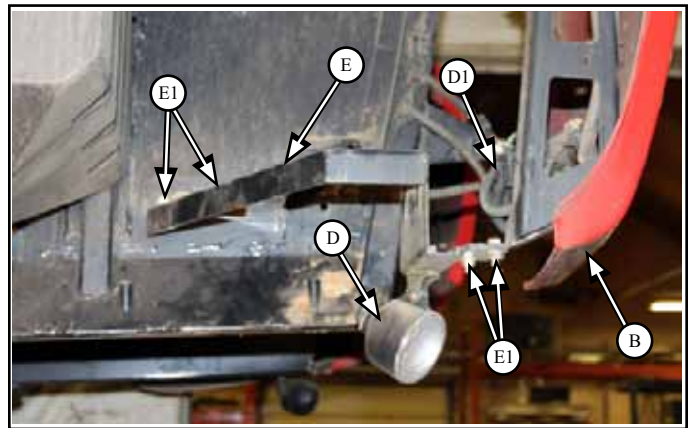
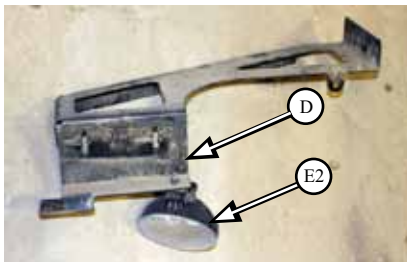
## 2.4 Remove Rear Support Bracket

2.4.1 Disconnect wire harness connector (D1) from light (D)

2.4.1.1 Tie up wire harness (D1) into corner panel (B)  
- to be reconnected

2.4.2 Remove hardware (E1) x4 mounting the rear support bracket (E) to left combine wall and rear corner panel (B)

2.4.3 Remove light (D) from support bracket (E)  
- to be reinstalled  
- support bracket (E) not to be reused

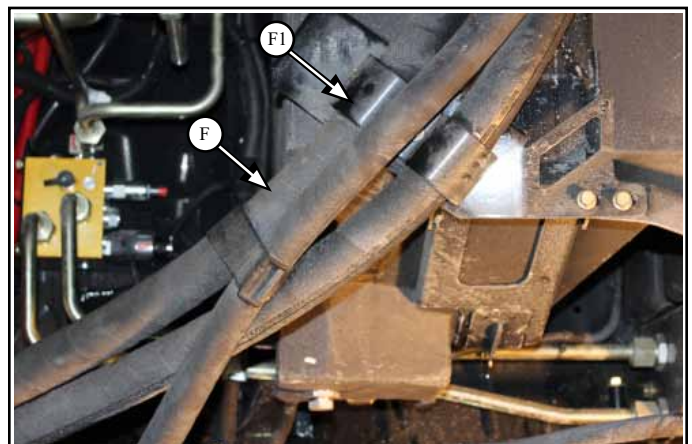


## 2.5 Prepare DEF Lines

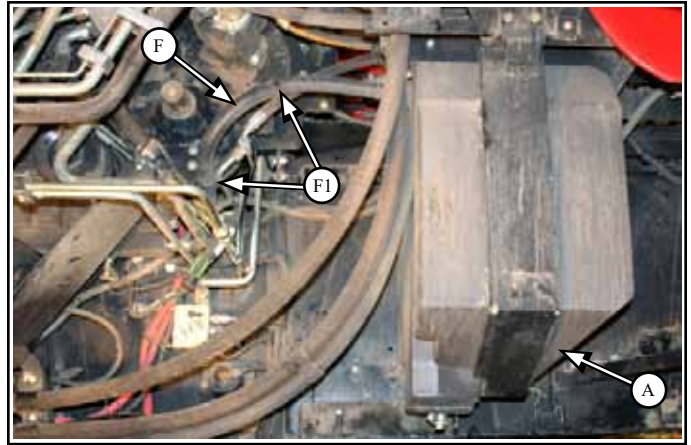
2.5.1 Remove hose clamps (F1) from ground drive hoses (F)



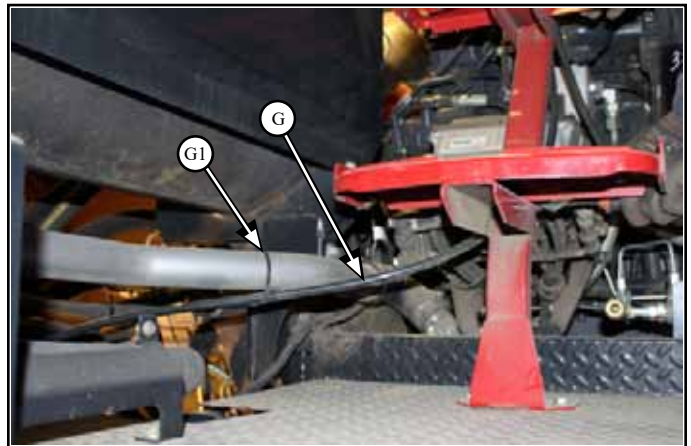
- Hoses will now be loose and will be reclamped into place upon completion of the MAV Chopper



**2.5.2** Remove hose clamps (F1) from DEF conduit (F)

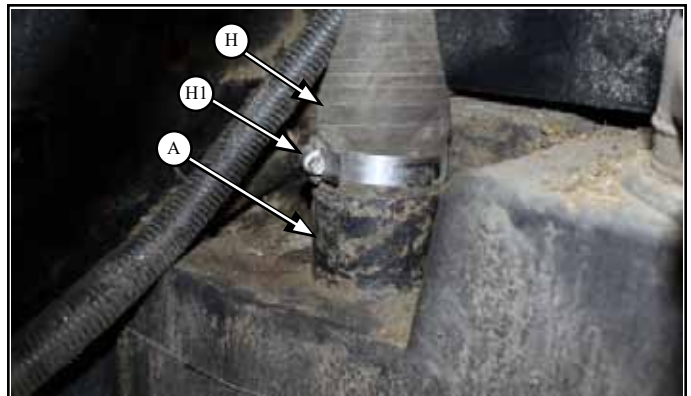


40 Series has vent line bolted above DEF line which is to be moved and reattached with bracket provided



**2.5.4** Loosen hose clamp (H1) from DEF fuel fill line (H)

**2.5.4.1** Remove DEF fuel fill line (H) from DEF tank inlet (A)



**2.5.4.2** Seal (A3) top of DEF fuel tank inlet (A) to prevent contamination in the tank



**DEF Tank relocation installation completed in section 3**

**2.6 Remove Left Fuel Tank**

Left fuel tank is standard on the 9240 and an option on the 8240

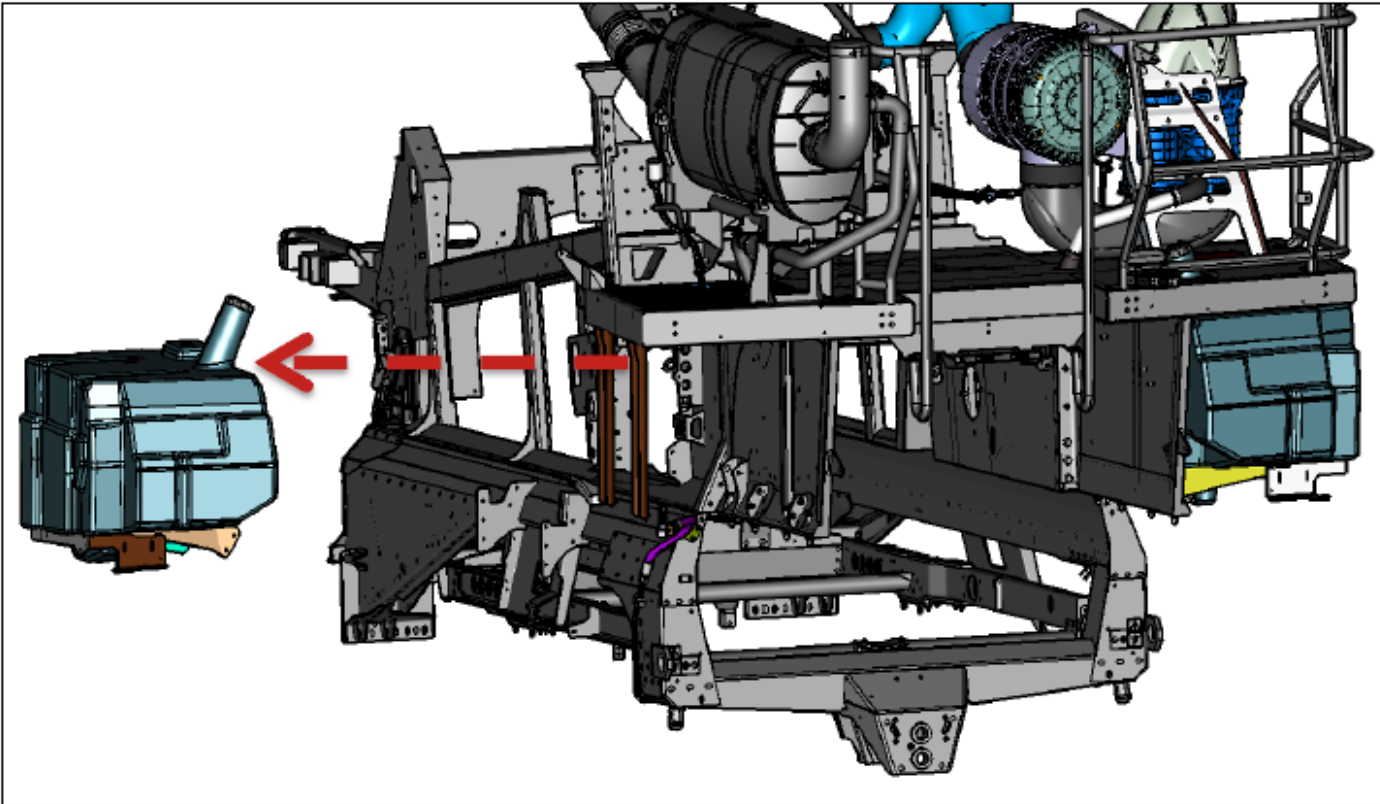
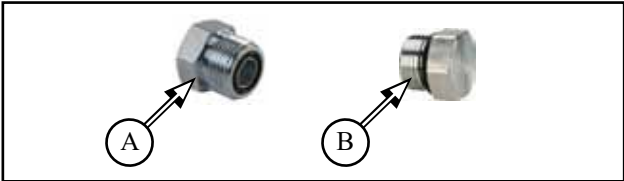
Required in order to move Def tank back to provide space for the chopper drive system

**Parts List:**

parts located in CS1136S bag

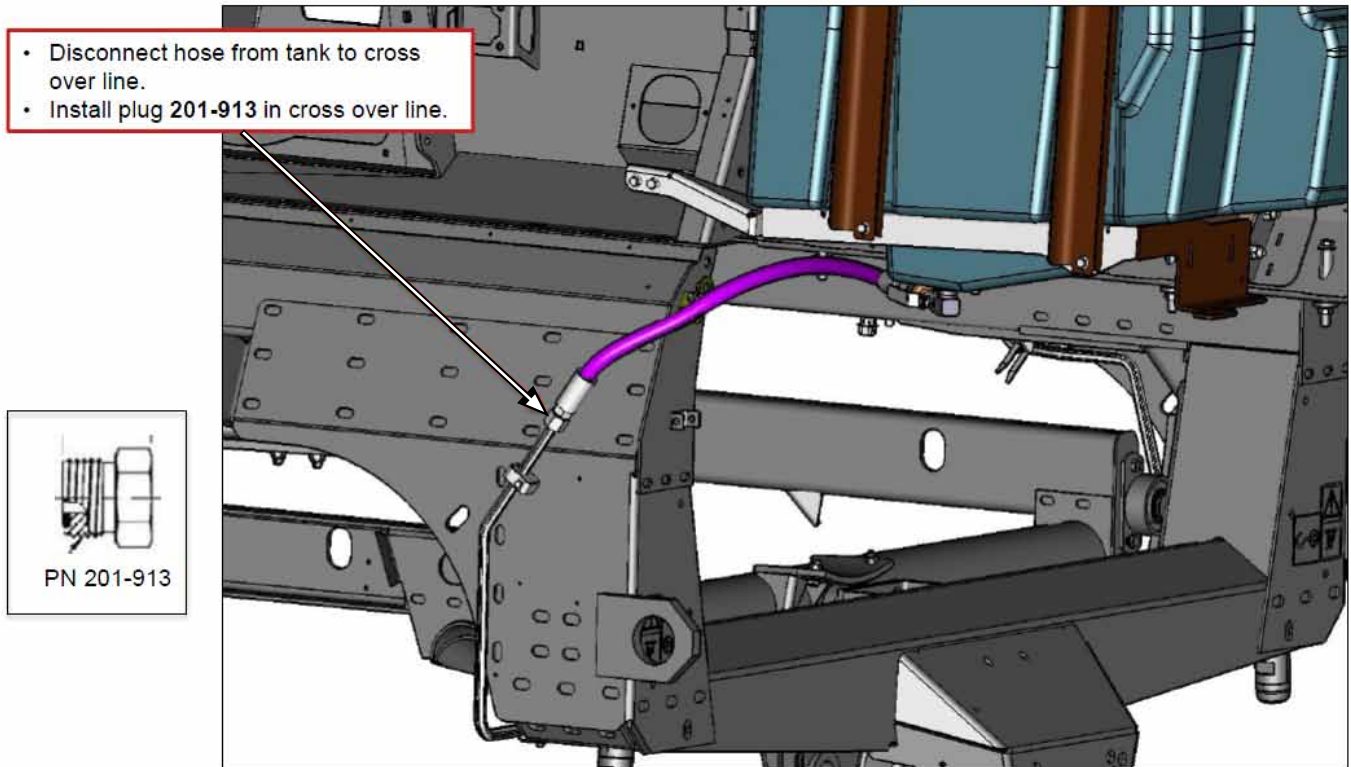
H17-10 Plug, ORFS 1-14 5/8 Tube (201-913) (A) Qty 1

H15-16 Plug, ORB 1-5/16-12 1.0 Tube (273916) (B) Qty 1

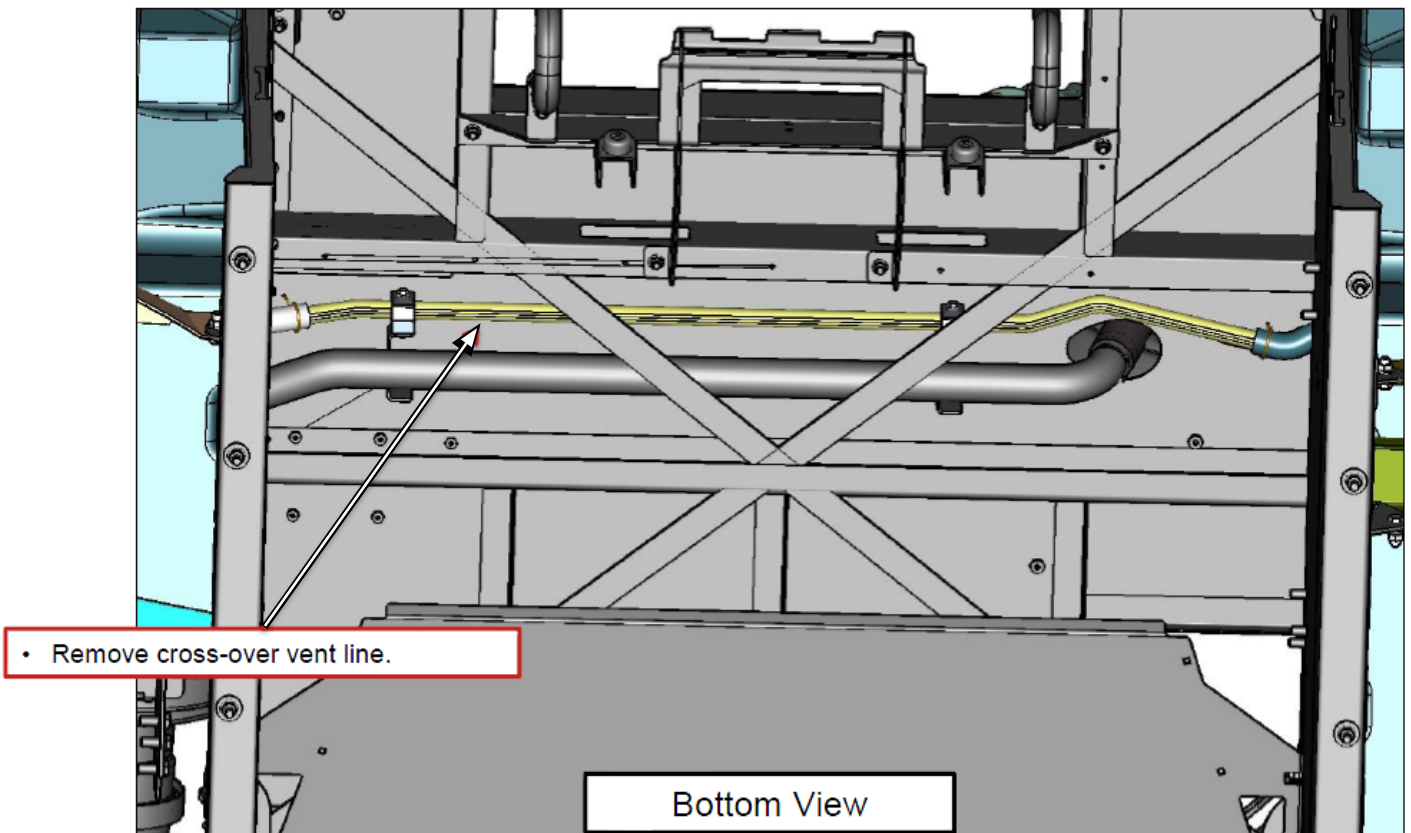


## 2.6.1 Disconnect LH Tank Cross-Over Line

### 2.6.1.1 Add plug

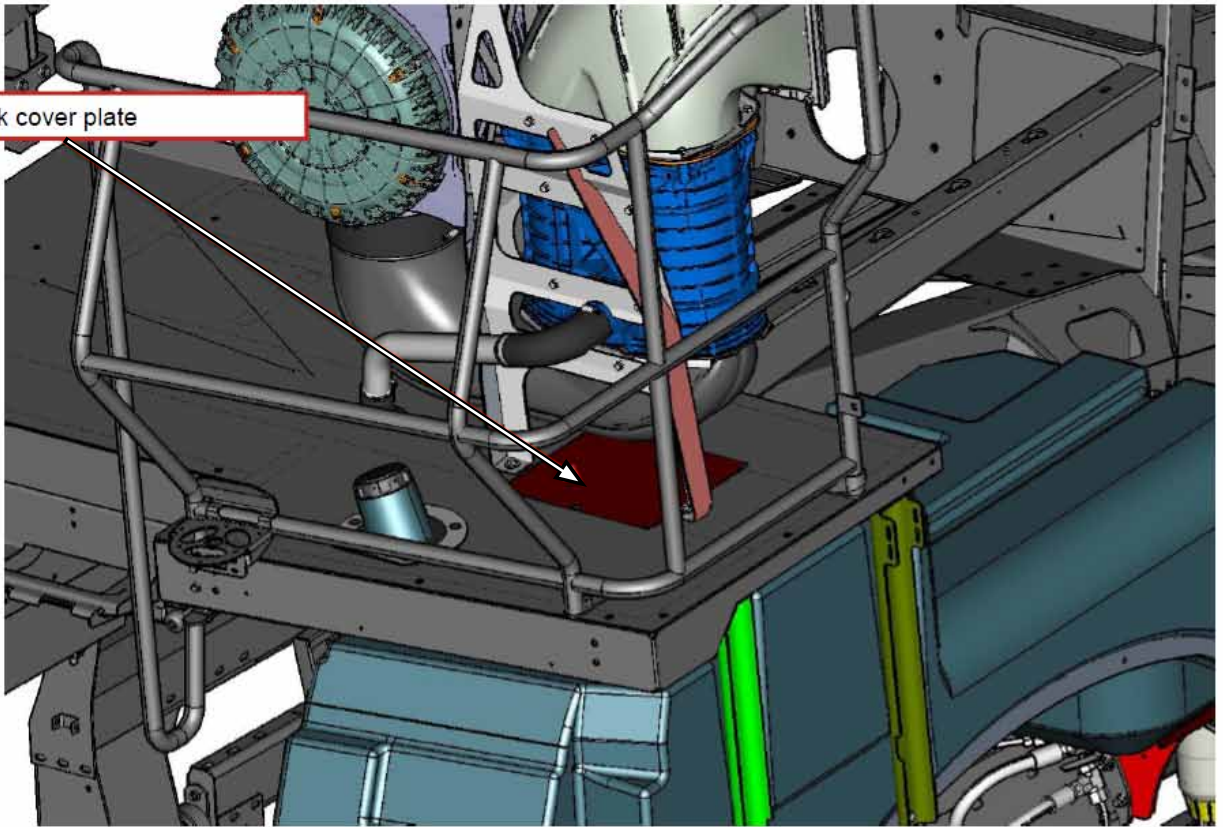


## 2.6.2 Remove LH Tank Vent Line



### 2.6.2.1 Remove Tank Cover Plate

- Remove tank cover plate



### 2.6.2.2 Remove hose and tank fitting

- Remove hose and tank fitting



### 2.6.2.3 Install plug

- Install plug 273916
- Reinstall cover plate



**2.6.3** Remove fuel tank mounting brackets and fuel tank as required  
- parts are not to be reused

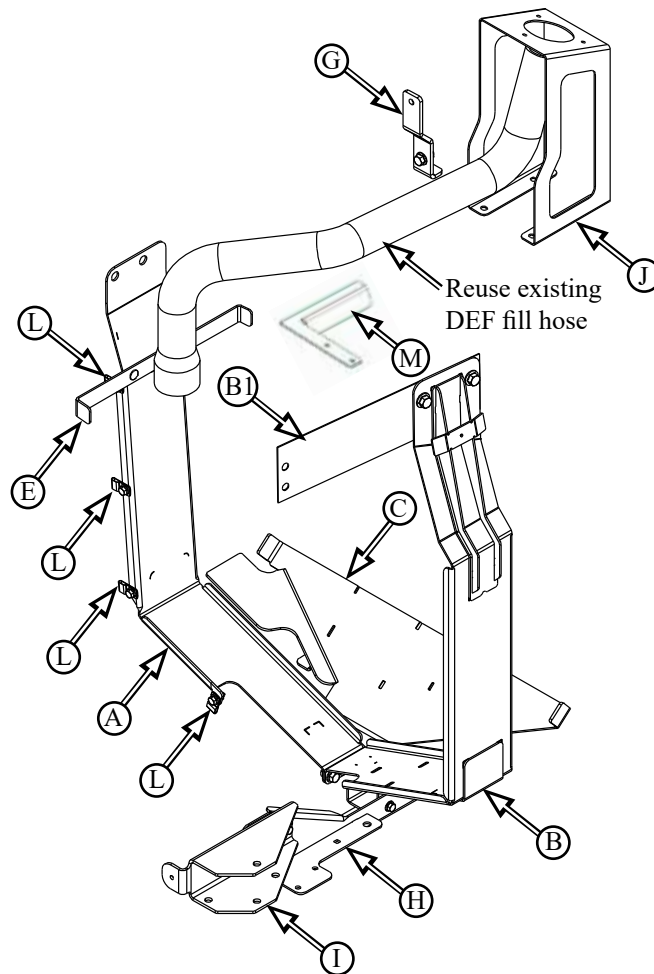


### 3 Diesel Exhaust Fluid (DEF) Tank Relocation Installation 230/240 Series (Required only on applicable machines)

Parts located on pallet and in CS917BS, CS1135BS boxes

**Parts List:**

CS890B Hanger Front DEF AFX (A)	Qty 1	CS829B Bracket Rear DEF Hanger (B)	Qty 1
CS829_TEMPLATE Bracket Rear DEF Hanger (B1)	Qty 1	CS826B Bottom DEF Mount Plate (C)	Qty 1
CS891B Bracket Top DEF Guide (E)	Qty 1	CS835B Bracket DEF Vent Mount (G)	Qty 1
CS831B Arm Panel Latch (H)	Qty 1	CS786B Bracket Panel Lock (I)	Qty 1
CS805B Bracket DEF Fill Tube Mount (J)	Qty 1	RP220 P-Clip 2W .375D x.75 Insulated (L)	Qty 4
CS875B Bracket DEF Fill Guard (M)	Qty 1		

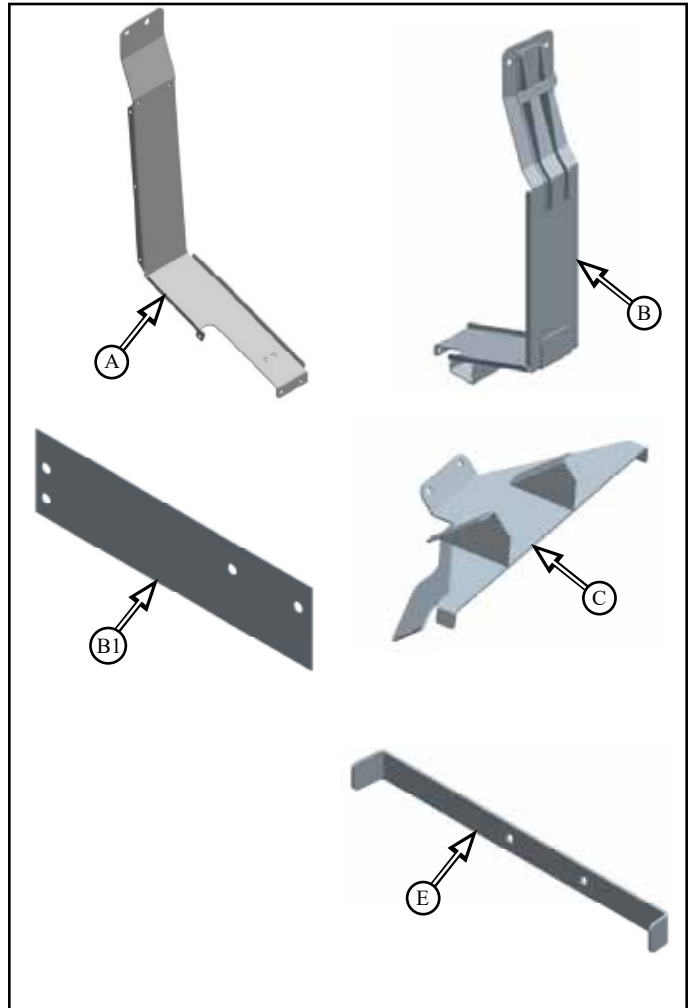


### 3.1 DEF Tank Installation

#### Parts List:

Parts located on pallet and CS917BS, CS1135BS boxes  
hardware located in CS850S bag

CS890B	Bracket Front DEF Hanger (A)	Qty 1
CS829B	Bracket Rear DEF Hanger (B)	Qty 1
CS826B	Bottom DEF Mount Plate (C)	Qty 1
CS829_TEMPLATE	Bracket Rear Def Hanger (B1)	Qty1
CS891B	Bracket Top DEF Guide (E)	Qty 1



#### 3.1.1 Remove Top Left Rear Panel (B2)

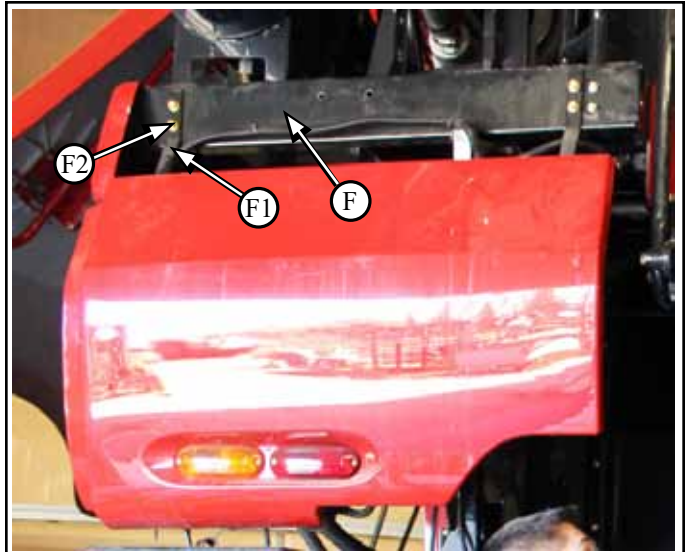
- to be reinstalled



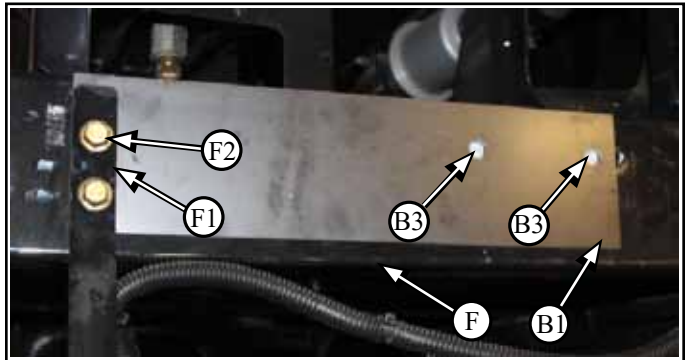


**Not Required for MY17 & Current Machines**  
**Holes are in Frame**  
**Steps 3.1.2 to 3.1.4.2**

**3.1.2** Remove hardware (F2) mounting bracket (F1) to top combine frame (F)



**3.1.3** Attach template (B1) to top combine frame (F) with mounting bracket (F1) and hardware (F2)  
Note: Not required for MY17 - holes are in the frame



**3.1.4** Mark holes (B3) through holes in template (B1) on to frame (F)

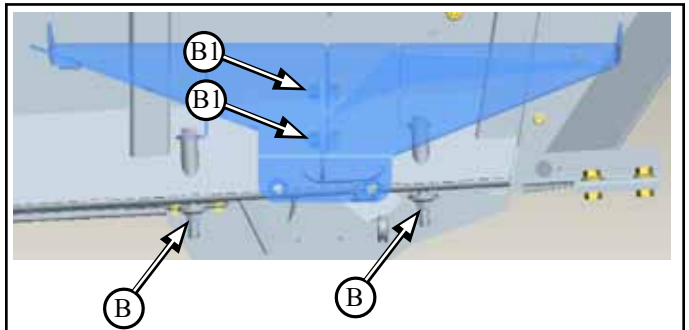
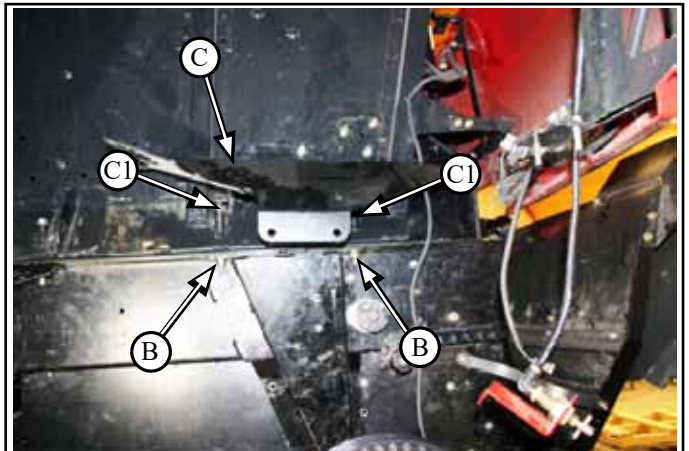
**3.1.4.1** Drill 12mm (.5 in) holes (B3) through top frame (F)

**3.1.4.2** Remove template (B1) and reattach bracket (F1) to combine frame (F)

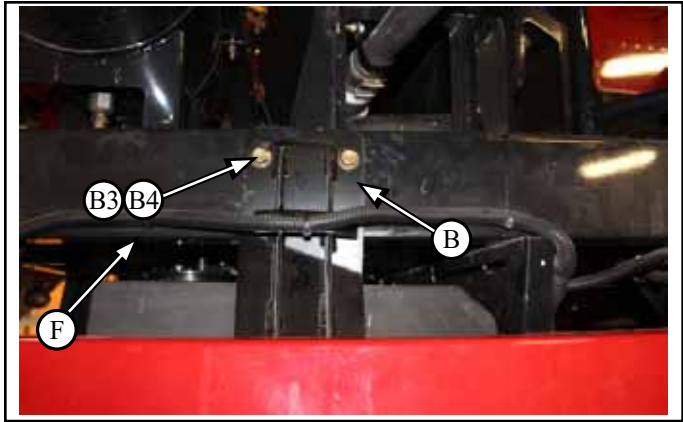
**3.1.5** Install bottom DEF mount plate (C) to the top of the last two bolt locations (C1) on combine frame with:

- Use existing M12 x 120 flange bolts and flange nuts (B)  
Note: Do not tighten the nuts on bolts until the chopper is installed

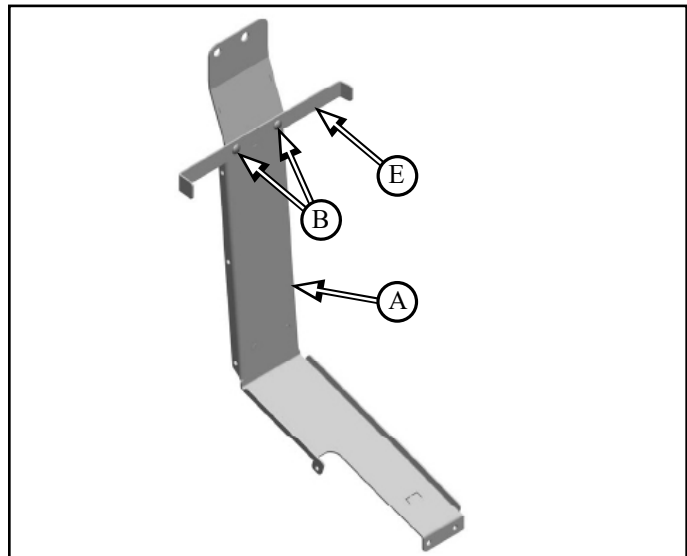
- M12 x 30 flange bolts and flange nuts (B1) x2



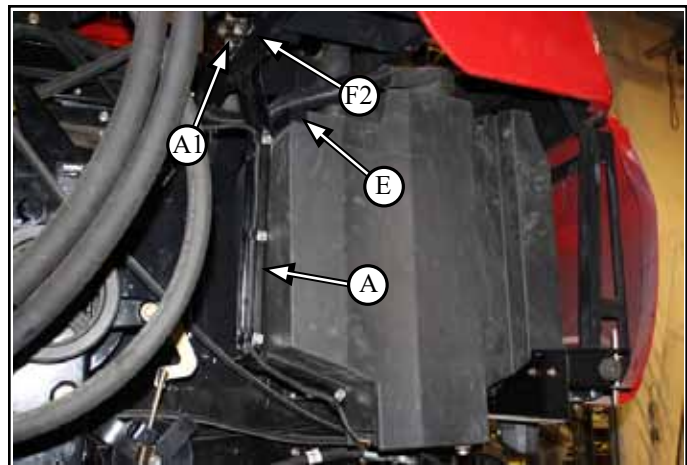
**3.1.6** Install rear DEF hanger bracket (**B**) to the top rail (**F**) holes (**B3**) just drilled with:  
- M12 x 30 flange bolt and flange nut (**B4**) x2



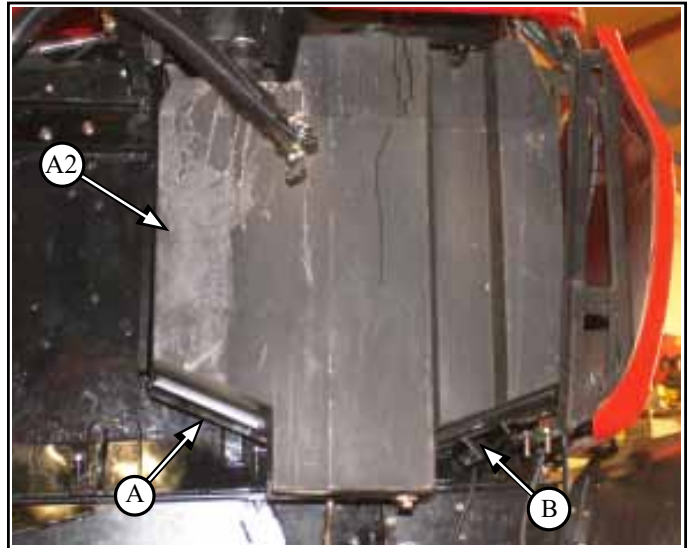
**3.1.7** Assemble CS891B Bracket Top DEF Guide (**E**) to front DEF hanger bracket (**A**) with:  
- M8 x 20 round head bolt and flange nut (**B**) x2



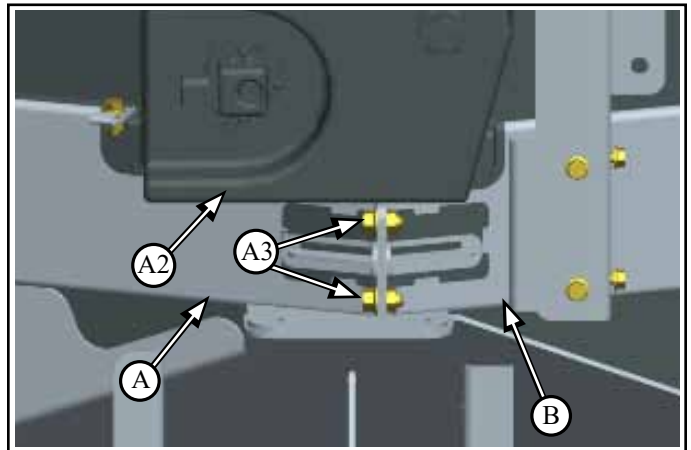
**3.1.8** Install front DEF hanger bracket (**A,E**) to the top combine rail frame (**F2**), with existing hardware:  
- M16 bolt and flange nut (**A1**) x2



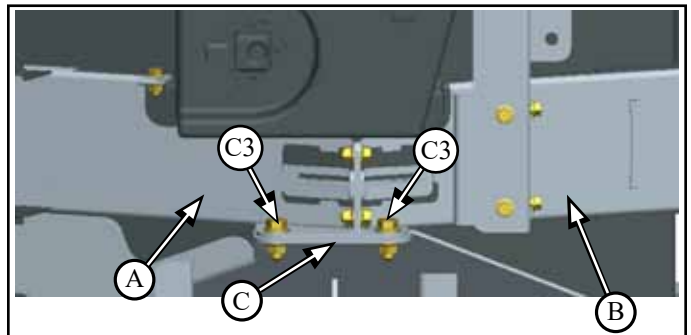
**3.1.9** Place DEF tank (A2) into place in to hangers (A) and (B)



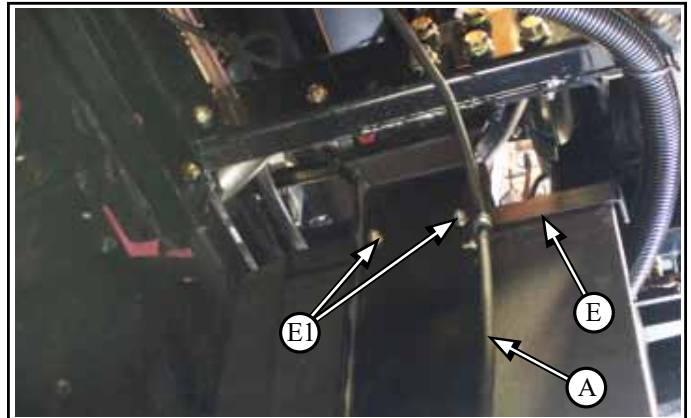
**3.1.10** Connect bottom of hanger brackets (A) and (B) together below DEF tank (A2) with:  
- M10 x 25 flange bolt (A3) x2



**3.1.10.1** Connect bottom of hanger brackets (A) and (B) to bottom DEF tank mount plate (C) with:  
- M12 x 30 flange bolt and flange nut (C3) x2



**3.1.11** Install top DEF mount guide (E) to top of front hanger bracket (A)  
- to be mounted in between DEF tank (A2) and bracket (A)  
with:  
- M8 x 20 round head bolt and flange nut (E1) x2  
Note: Place round head of the bolt towards the tank and the nut to the outside

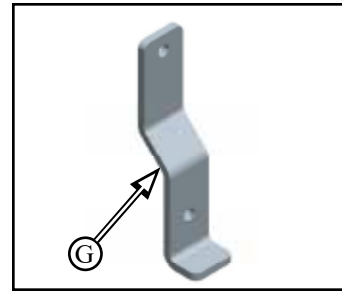


### 3.2 Def Ventilation Bracket Mount Installation

#### Parts List:

part located in CS917BS box  
hardware located in CS850S bag

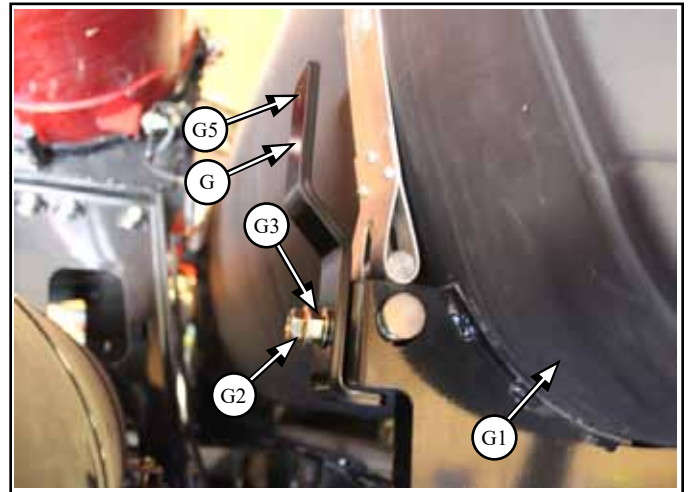
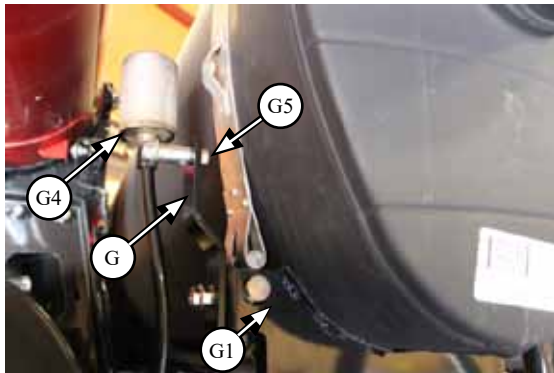
CS845B Def Vent Mount Bracket (G) Qty 1



#### 3.2.1 Mount def vent mount bracket (G) beside air tank (G1), with:

- M10 x 25 flange bolt (G2) x1
- M10 flange nut (G3) x2
  - thread nut onto bolt fully, then tighten bracket (G)

#### 3.2.2 Mount factory vent (G4) on the top hole (G5)

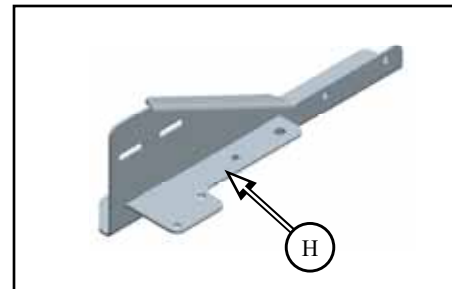


### 3.3 Arm Panel Latch Installation

#### Parts List:

part located in CS917BS box  
hardware located in CS850S bag

CS831B Arm Panel Latch (H) Qty 1

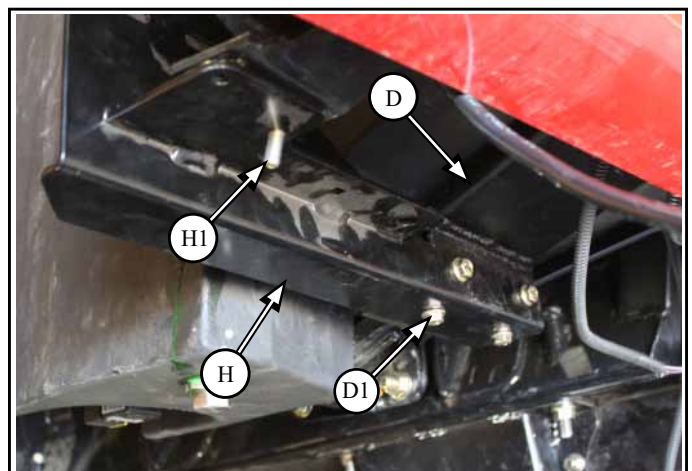


#### 3.3.1 Mount arm panel latch (H) onto the bottom of hanger (D) thru welded holes, with:

- M8 x 20 flange bolt and flange nut (D1) x4

Secure Arm Panel Latch (H) to the factory combine frame with:

- existing hardware (H1)



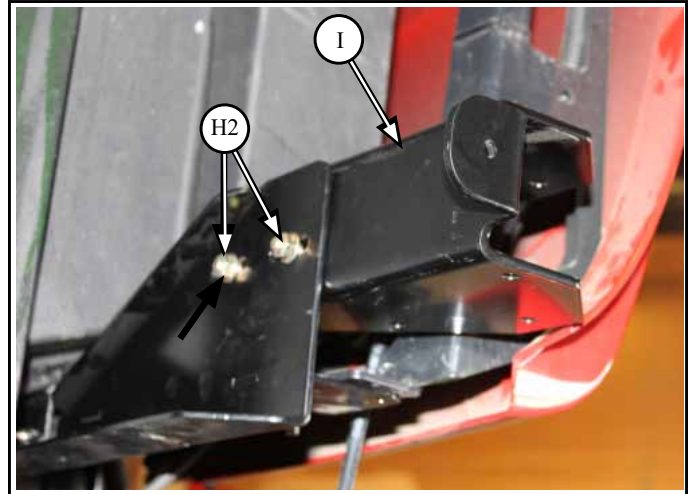
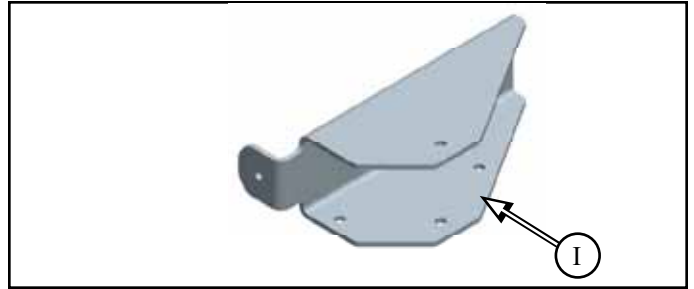
### 3.4 Bracket Panel Lock Installation

#### Parts List:

part located in CS917BS box  
hardware located in CS850S bag

CS786B Bracket Panel Lock (I) Qty 1

**3.4.1** Mount bracket panel lock (I) thru the top side holes in the arm panel latch (H) with:  
- M8 x 20 flange bolt and flange nut (H2) x2

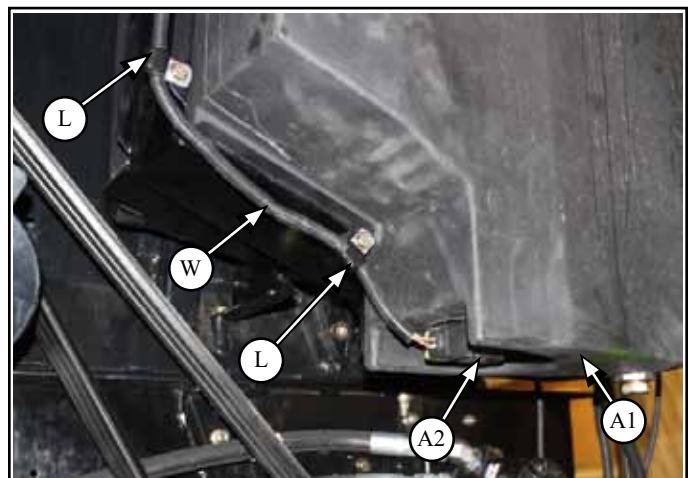
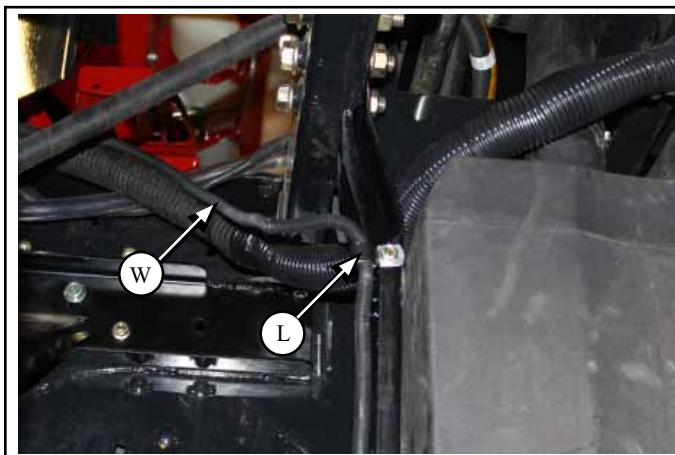
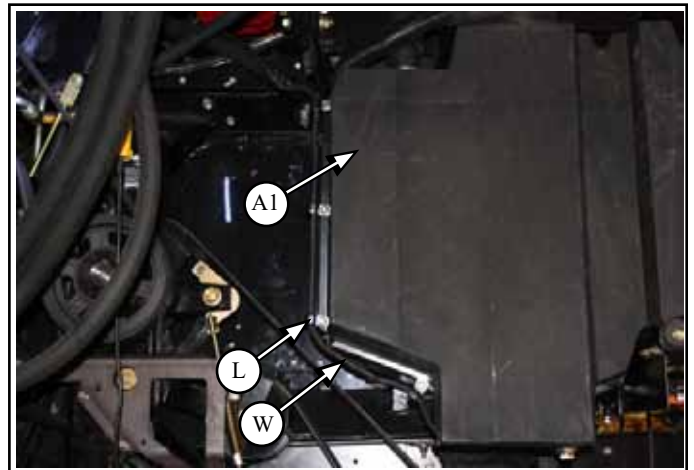


### 3.5 Existing DEF harness re-attachment

#### Parts List:

240 Series only - DEF quality sensor harness (W) Qty 1

**9.7.1** Plug DEF harness (W) at the bottom of DEF tank (A1) into the socket (A2). Mount cable (W) around def tank (A1) all the way to the top. Use RP220 (L) x4 to secure wire



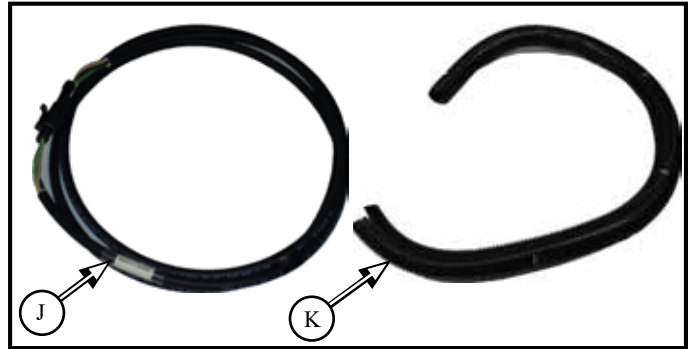
**240 Series Only**

**3.6 Plastic Cable Loom 52 in long Installation**

**Parts List:**


RP925 Harness Electric 3W x 7ft AMP - 240S (J) Qty 1

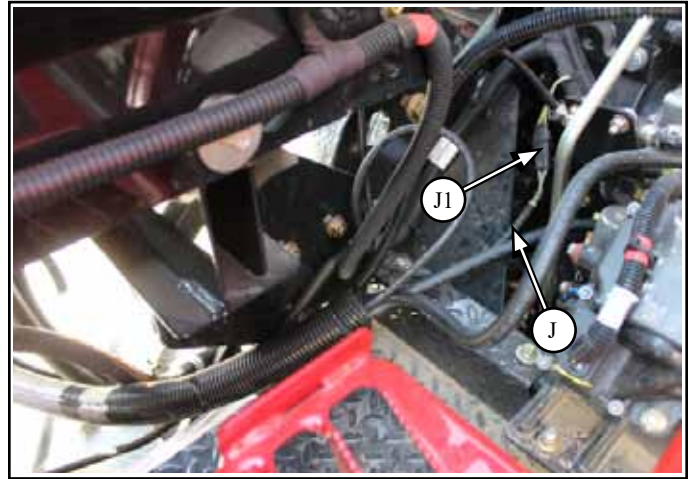
CS905-01 Plastic Cable Loom 52 in long (K) Qty 1



 **230 Series DEF lines not extended**

**3.6.1** Connect harness (J) at the top roof of combine to into the socket (J1)

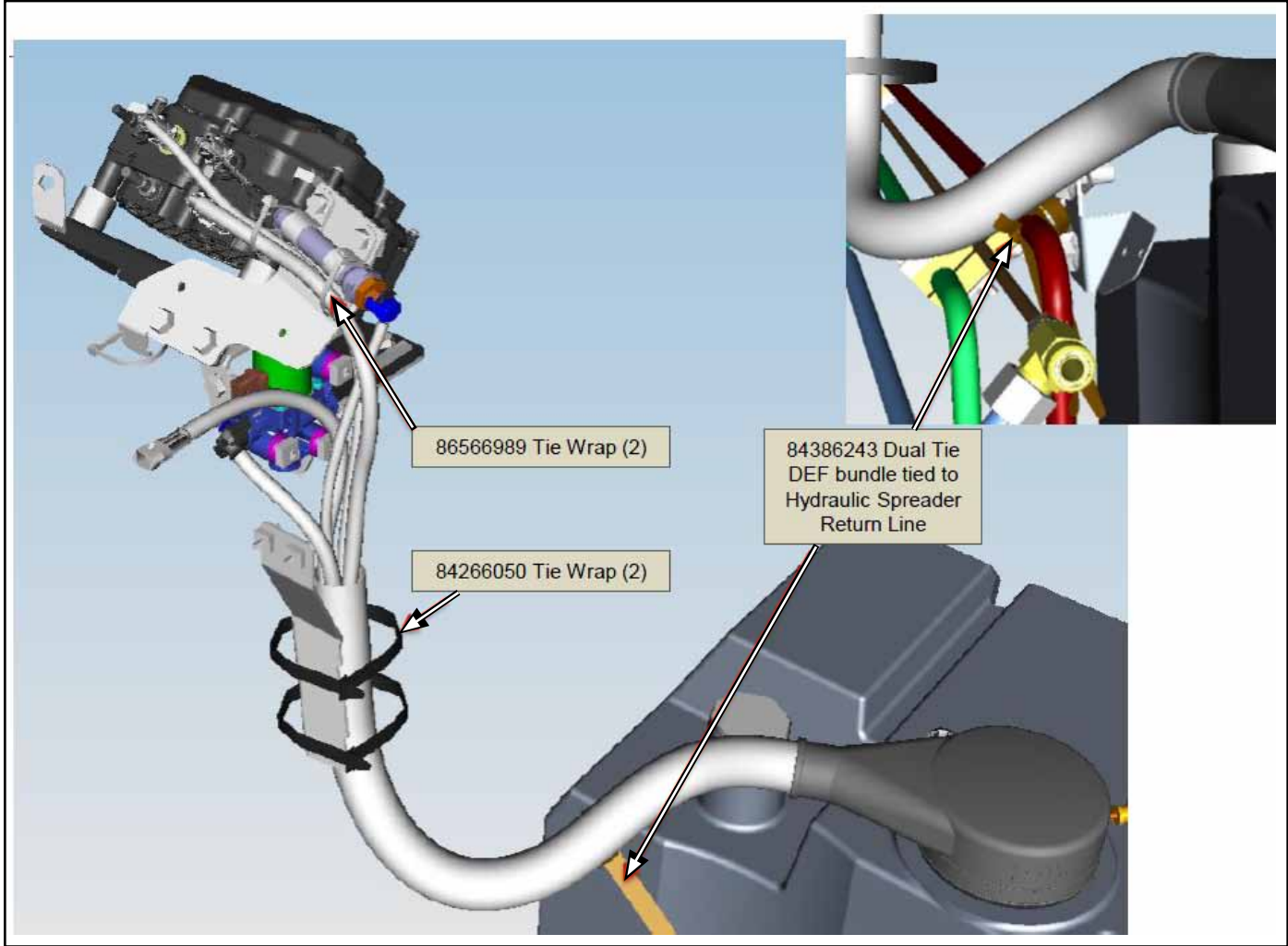
 **Please review detailed def tank harnesses installation guide below provided by CNH**



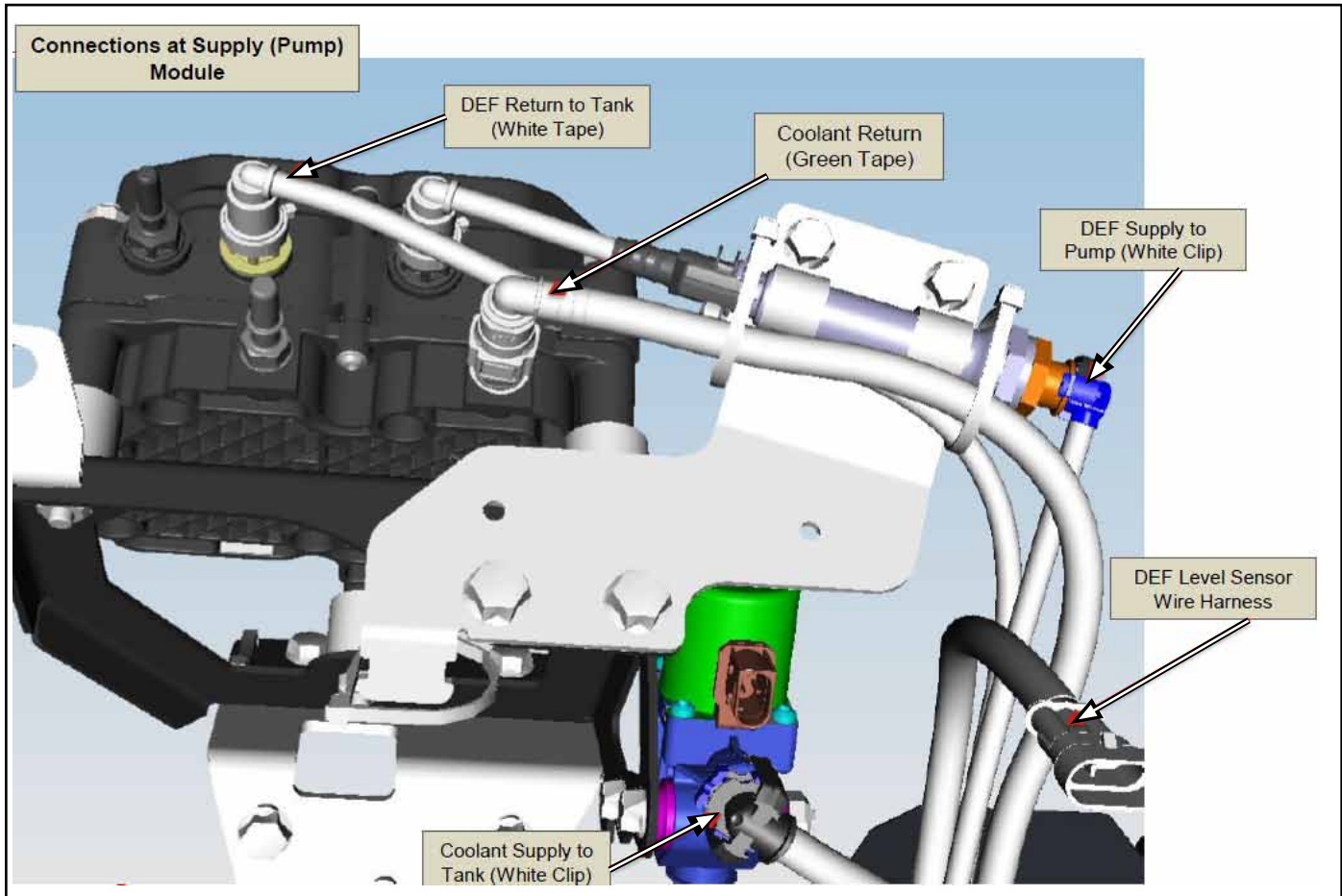


**3.7 240 Series DEF Line Extension - not required for 230 Series  
240 Series MY17 - Order DEF Bundle From CNH Service Parts**

**3.7.1 47776423 DEF Bundle - Tank to Supply Module**



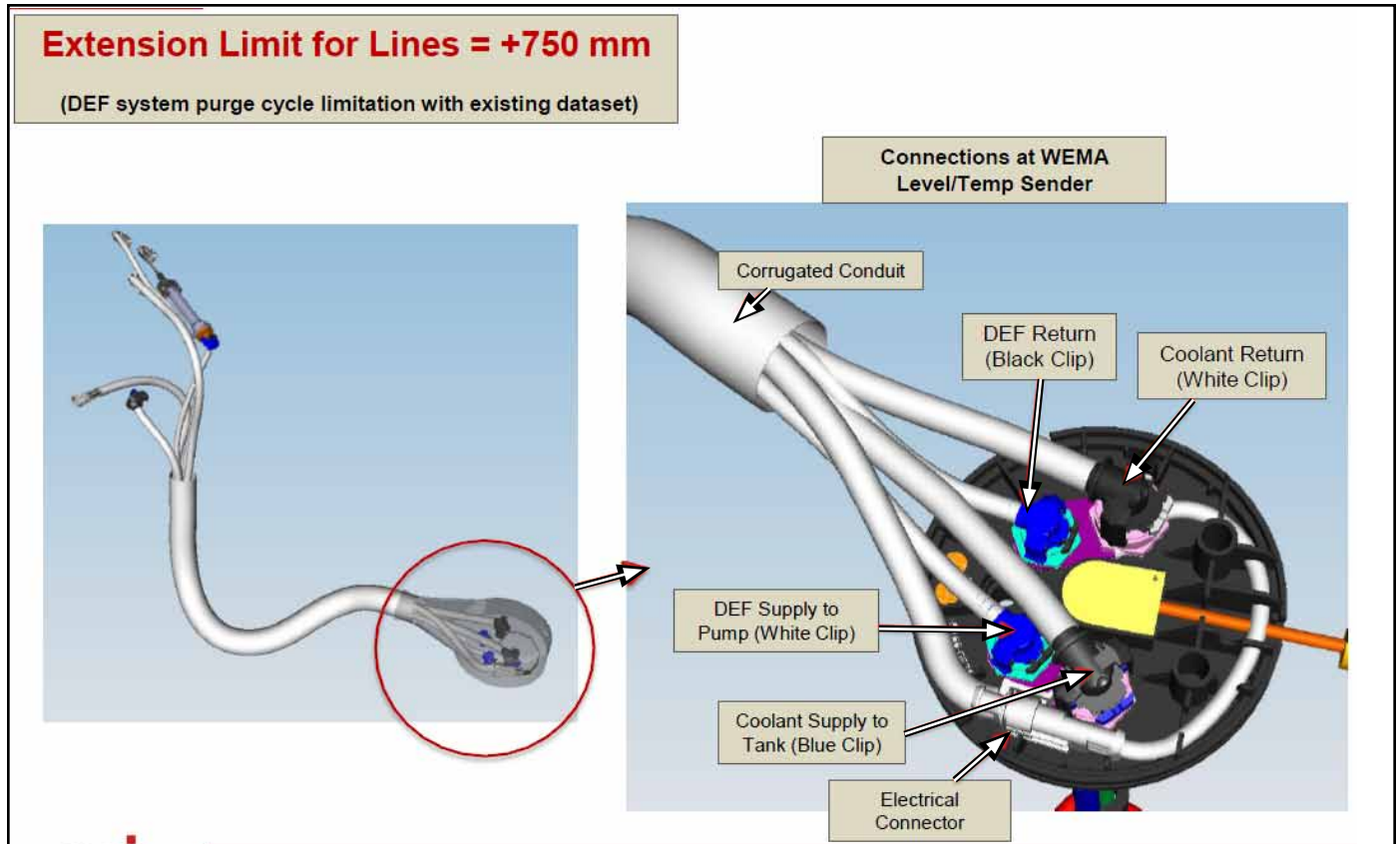
3.7.1.1 47776423 DEF Bundle - Tank to Supply Module



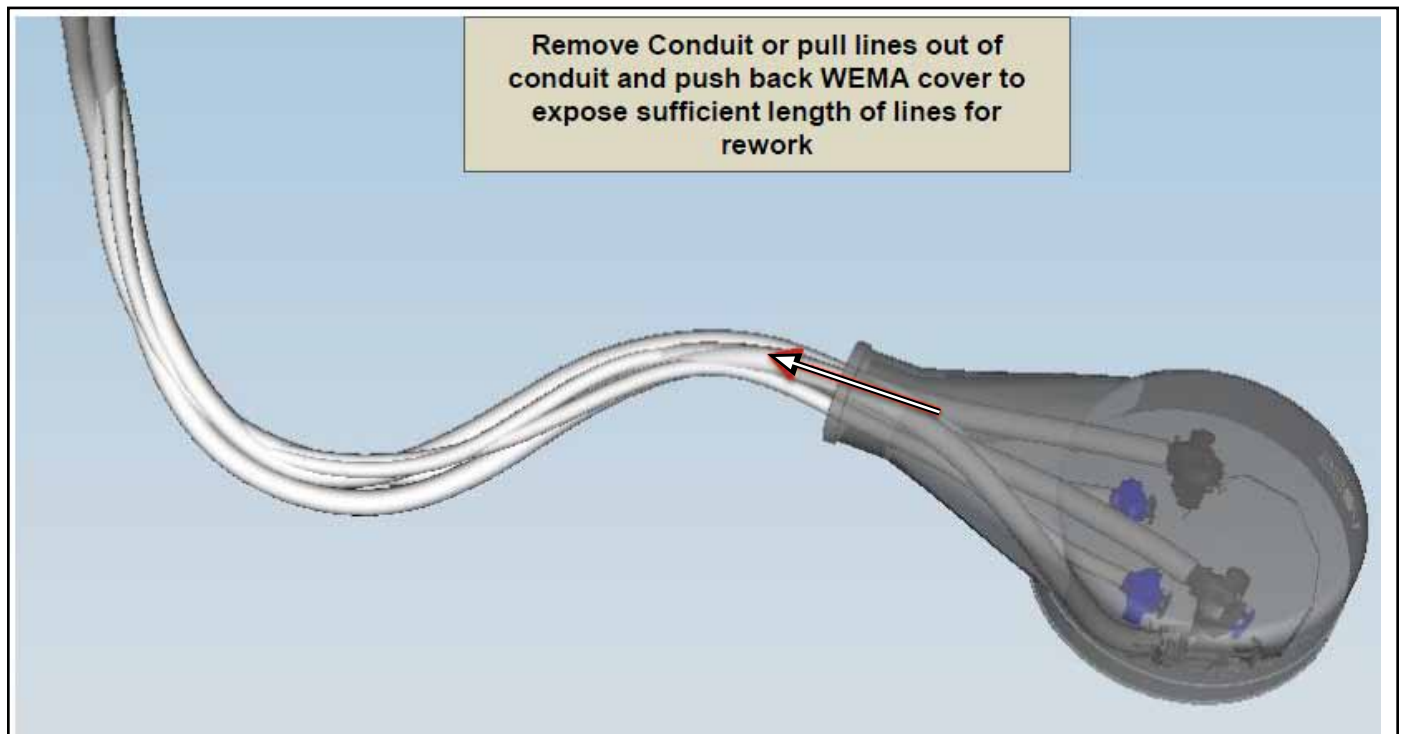
3.7.1.2 47776423 DEF Bundle - Tank to Supply Module

47776423 DEF Bundle can be replaced with 48037151 or extended using procedure below

\*\* Full 750mm extension required \*\*



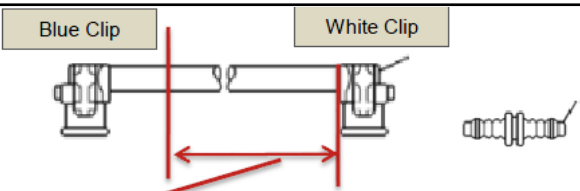
9.9.1 47776423 DEF Bundle - Tank to Supply Module



### 3.7.2 Extending DEF Lines

CNHi Service Parts Needed:

- 47777353 (qty 2) DEF Line w/ SV246 NG8 Elbow Connector
- 47777447 (qty 2) Barbed Connector for DEF line
- 47655259 Tool Box

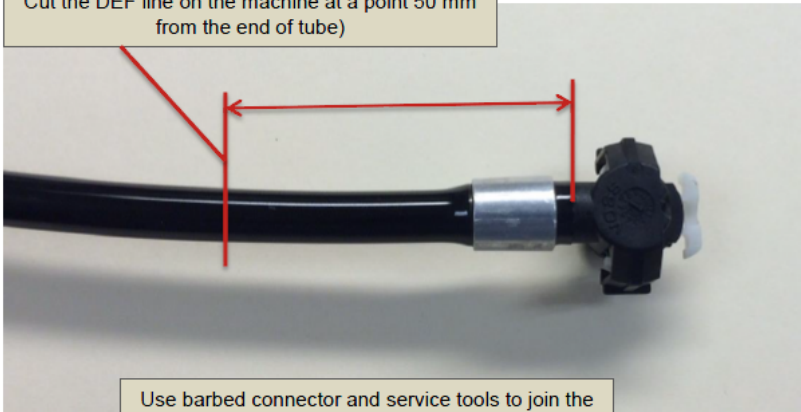


Blue Clip

White Clip

Cut service line from desired connector end (blue or white) at a length of 800 mm from end of tube

Cut the DEF line on the machine at a point 50 mm from the end of tube)



Use barbed connector and service tools to join the new longer line/connector to the machine line – see video link below

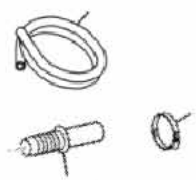
<https://www.youtube.com/watch?v=Kdo9zG0Jrt8>

*Use of the tool starts at the 9 ½ minute mark*

### 3.7.3 Extending Coolant Lines

CNHi Service Parts Needed:

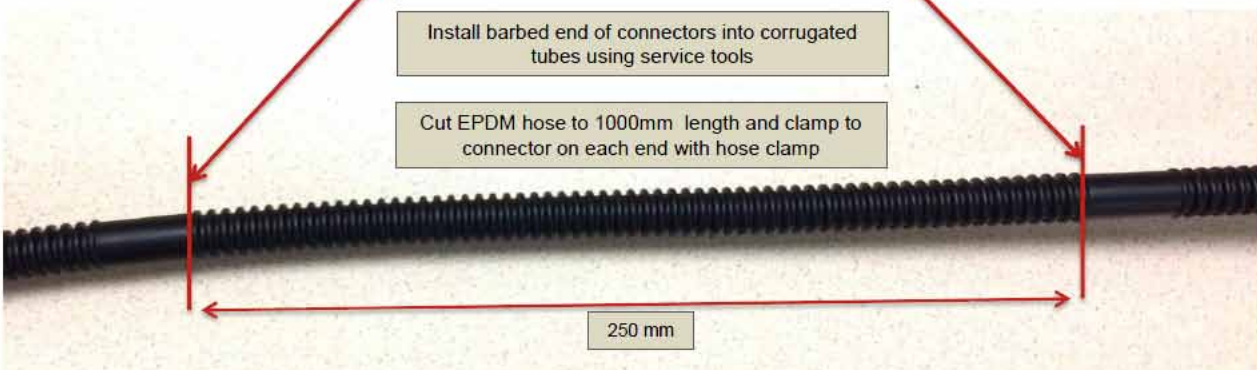
- 84480613 EPDM Hose
- 84480601 (qty 2) Hose Connector for coolant line
- 84480356 (qty 2) Hose Clamp
- 47655259 Tool Box



Cut coolant line here – Leaving smooth section for installation of barbed end of connector

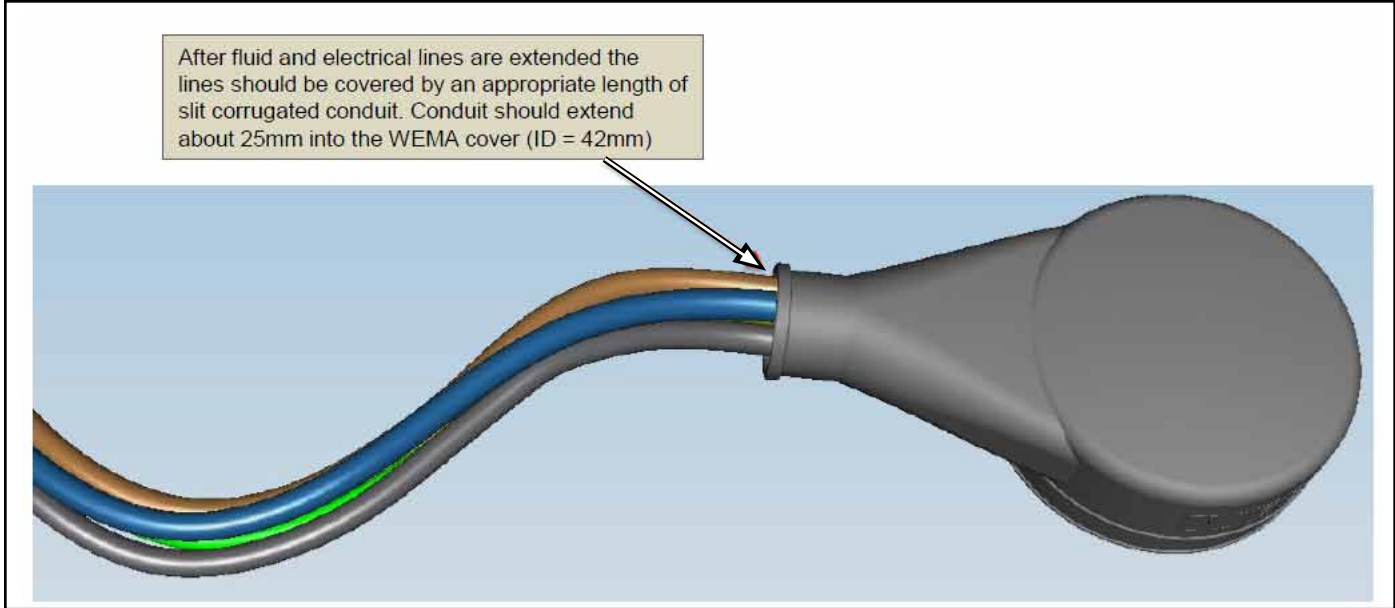
Install barbed end of connectors into corrugated tubes using service tools

Cut EPDM hose to 1000mm length and clamp to connector on each end with hose clamp



250 mm

3.7.4 47776423 DEF Bundle - Tank to Supply Module



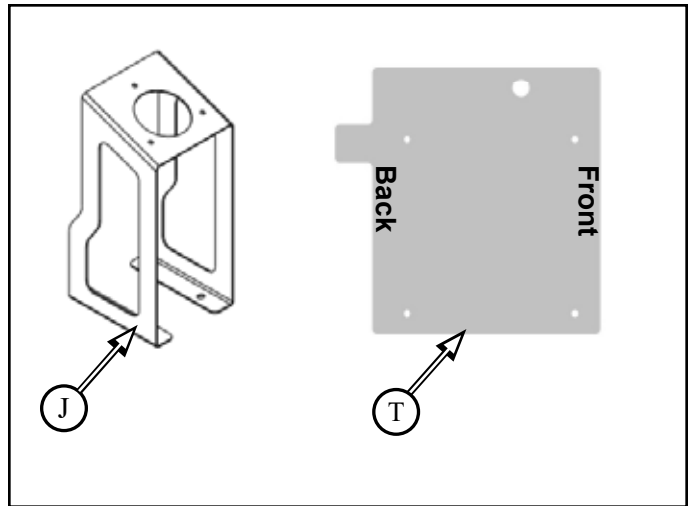
### 3.9 DEF Tank Fill Tube Relocation

#### Parts List:

parts located in CS917BS and CS1135BS boxes  
hardware located in CS850S bag

CS805B Bracket Def Fill Tube Mount (J)	Qty 1
Decal #47692590A (O4) (not supplied)	Qty 1
CS805_Template DEF Fill Bracket Template (T)	Qty 1

Note: Template works for MY17 only



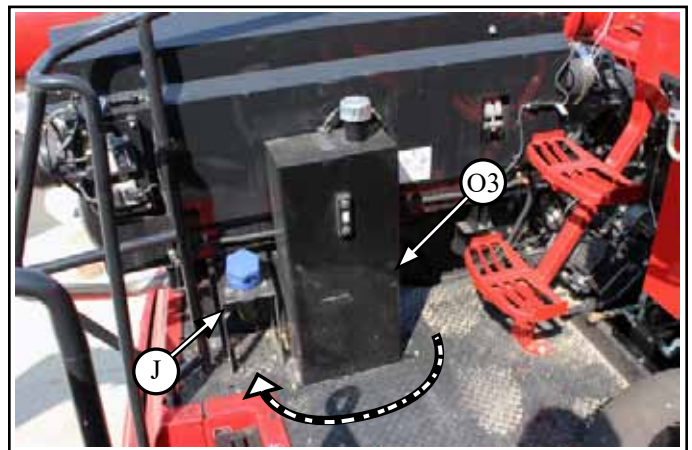
**3.9.1** Loosen hose clamp (O2) around filler tube (O1) at DEF filler cap neck (A2)

**3.9.1.1** Disconnect filler tube (O1) from DEF filler cap neck (A2)

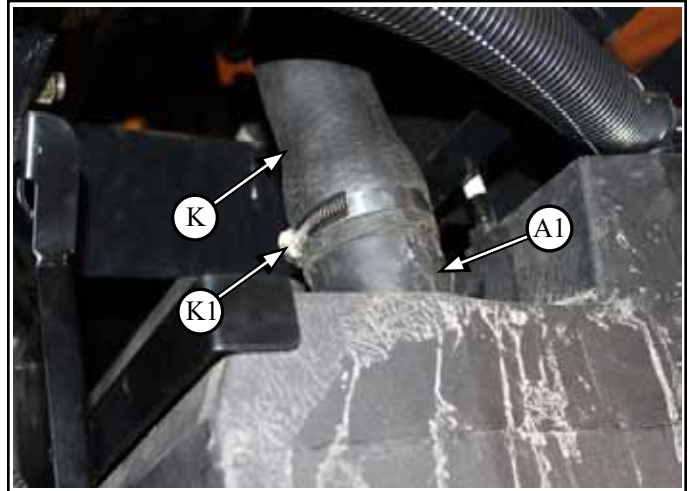



**3.9.2** Relocate filler tube mount bracket from front of reservoir tank (O3) to rear of tank

- original mount bracket is not to be reused, use new DEF fill mount bracket (J)

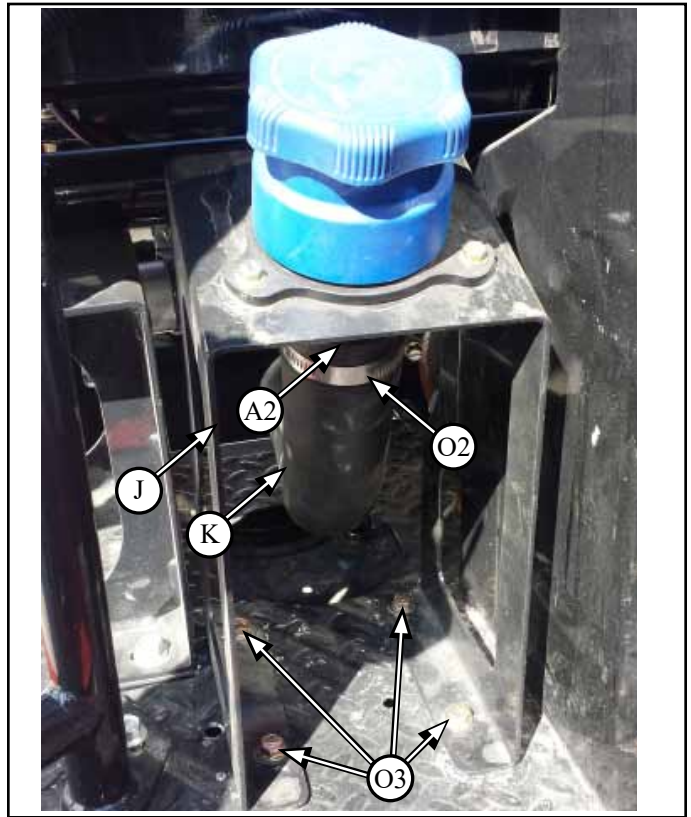


**3.9.3** Re-install DEF Filler Hose (K) to the DEF Tank (A1) - tighten hose clamp (K1)



 **Not Required for MY17 & Current Machines**  
**Holes are in Deck**  
**Step 3.9.4.**

**3.9.4** Drill 10mm (13/32in) holes (O3) x4 into the floor to mount filler tube bracket (J)  
 - Use CS805\_Template (T)  
 Note: Not required for MY17 Machine

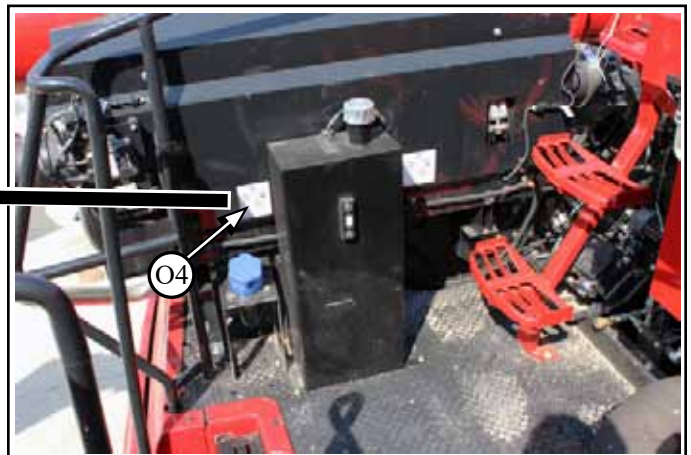


**3.9.5** Reattach DEF filler hose (K) to the DEF Tank filler cap neck (A2) - tighten hose clamp (O2)

**3.9.6** Attach filler tube mount bracket (J) to the floor with existing factory hardware (O3)

**3.9.7** Apply decal (O4) in new location (O5) just above relocated DEF filler hose cap (A)

**Decal #47692590A - order from Case IH Parts**

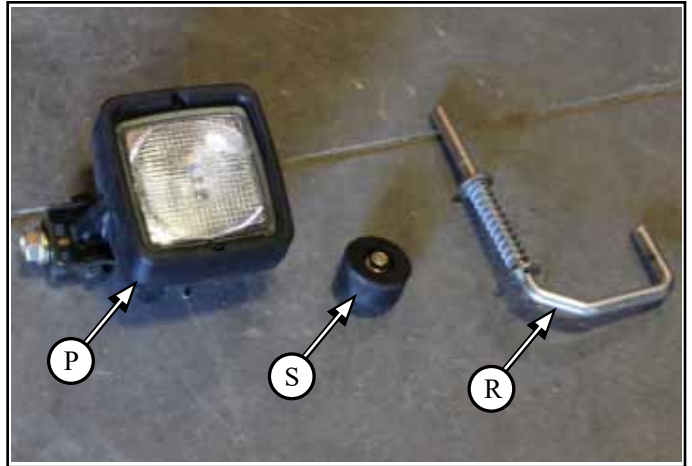


### 3.10 Rear Left Light Components Install

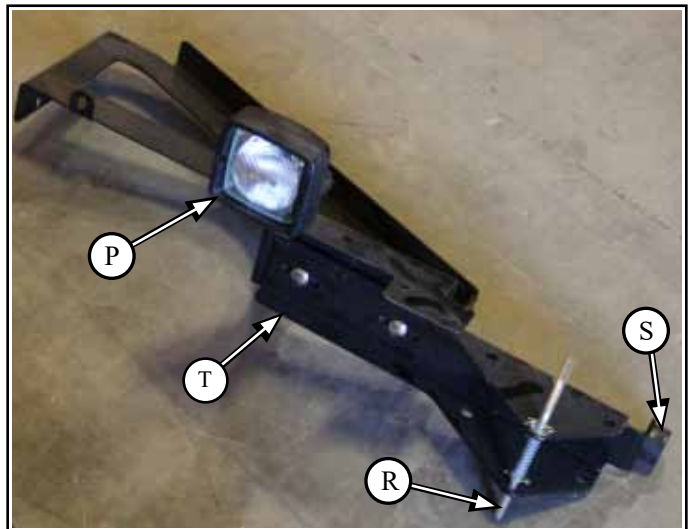
#### Parts List:

to be re-installed from the factory assembly

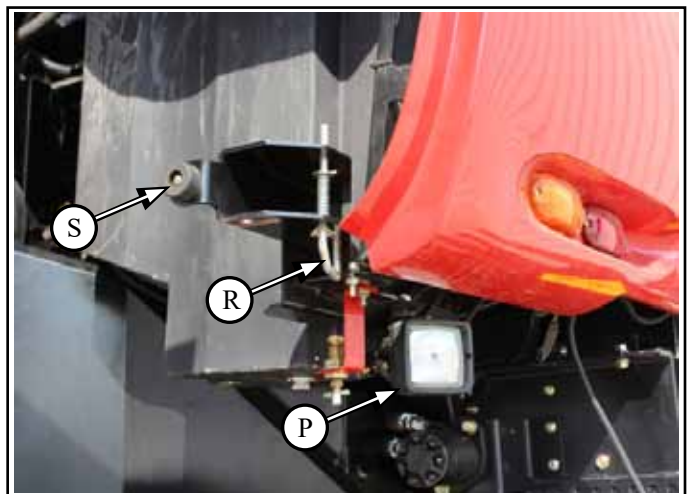
- |                         |       |
|-------------------------|-------|
| Rear Left Light (P)     | Qty 1 |
| Body panel Door Pin (R) | Qty 1 |
| Rubber Bumper Stop (S)  | Qty 1 |



3.10.1 Remove listed above parts (P), (R), (S) from the factory bracket (T)



3.10.2 Install parts (P), (R), (S) on the rear beauty panel of combine in shown locations





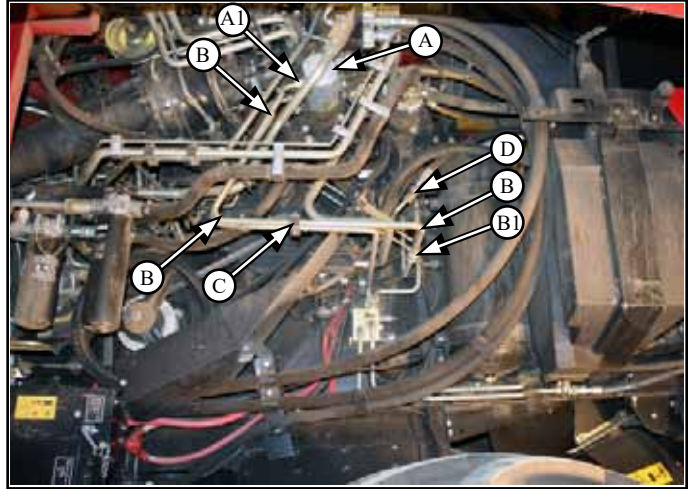
## 4 Hydraulic line modifications



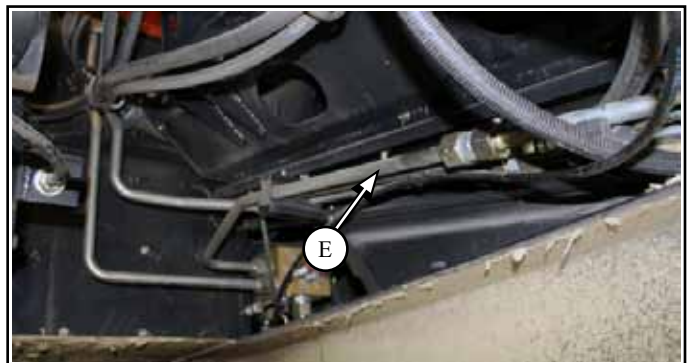
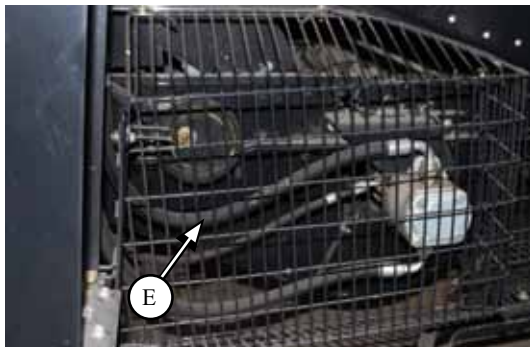
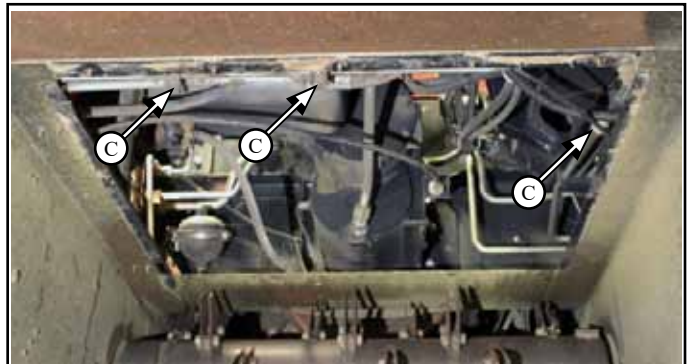
Not Required for MY17 & Current Machines  
Hydraulic Line Modified  
Steps 4.1 to 4.3.9

### Reference:

- A - Pump
- A1 - Pump Connection
- B - Hydraulic Steel Tube (to be removed)
- B1 - Hydraulic Steel Tube Connection
- C - Hydraulic Steel Tube Clamp
- D - Hydraulic Hose Return Line Connection
- E - Hydraulic line (fan side)
- F - Upper Internal Access Panel
- G - Internal Chopper Rotor
- H - Sieve



**NOTE:** Newer models already have the hydraulic line (L) relocated as seen in the picture above



### 4.1 Hydraulic line changes at PTO

**\*\* If available - use vacuum at reservoir to reduce oil leakage \*\***

**Parts List:**

parts located in CS1135BS box  
hardware located in CS839S bag

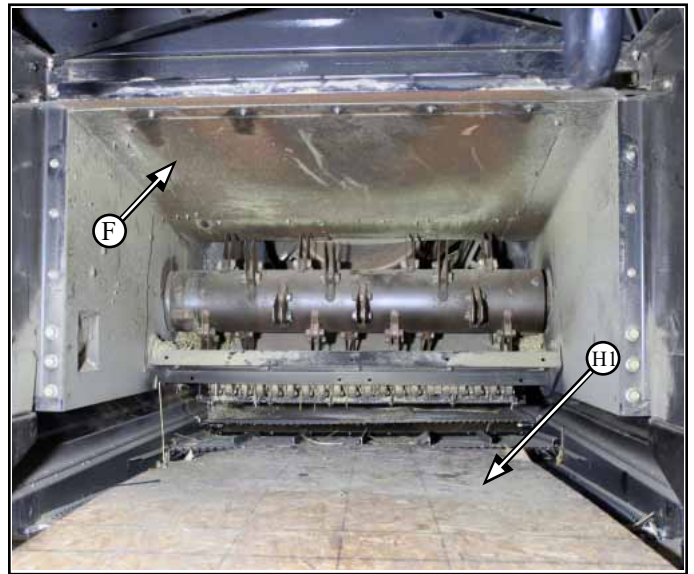
HH112	Hydraulic Hose .625 x 148L (I)	Qty 1
H99-12	Hose Clamp .75 (L)	Qty 8
H99-14	Hose Clamp .875 (M)	Qty 8
H99-18	Hose Clamp 1.125 (N)	Qty 6
H99-20	Hose Clamp 1.25 (P)	Qty 4



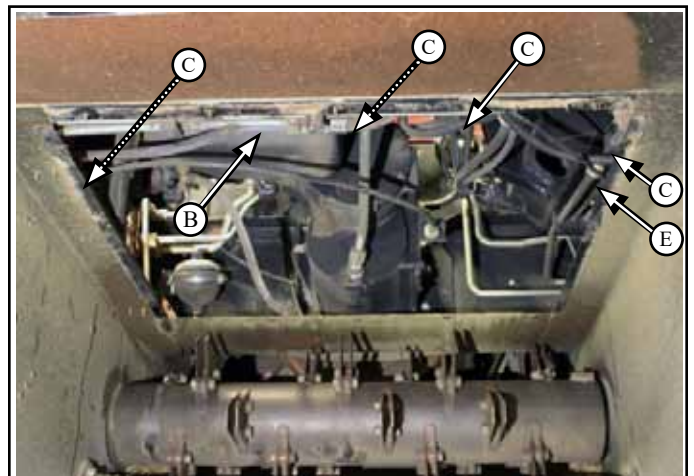
**4.1.1** Lay plywood (H1) on top of sieve (H) to prevent damaging sieve (H).

**4.1.2** Remove upper access panel (F)  
**\*\* Nuts are not welded on combine at rear of panel, use caution not to lose them \*\***

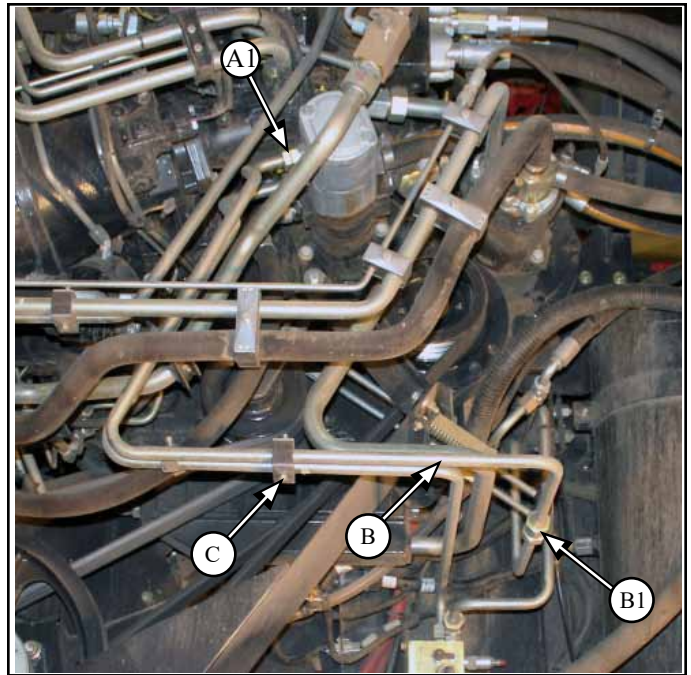
- to be reinstalled
- keep all factory hardware



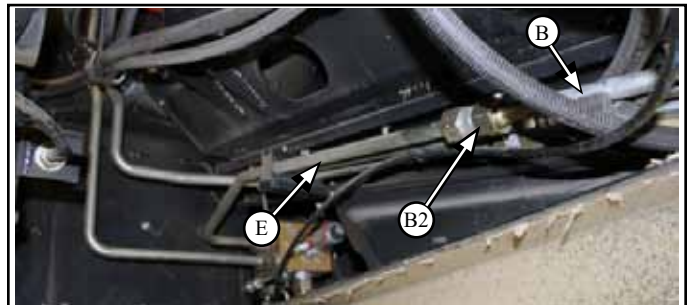
**4.1.3** Remove hose clamps (C) securing steel hydraulic line (B) running from pump (A) on outer combine wall to connection (E) in upper access area  
- qty as required



**4.1.4** Remove hose clamps (C) securing hydraulic steel line (B) on outside of left combine wall (drive side).  
 - qty as required

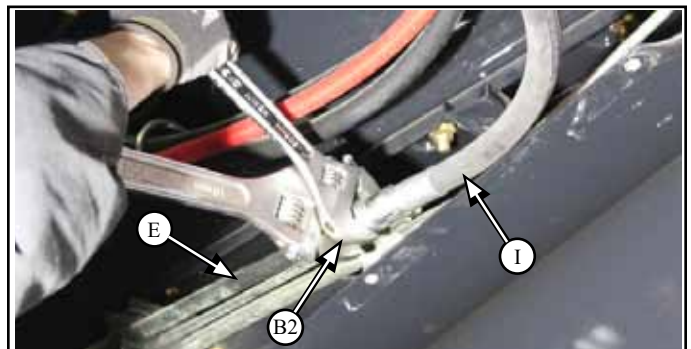


**4.1.5** In combine upper access panel - Quickly disconnect hydraulic steel line (B) from fan side hydraulic line (E) at fitting (B2)  
 - have a container ready to catch any fluid that may leak  
 - plug end of steel line removed or drain fluid in line after disconnecting

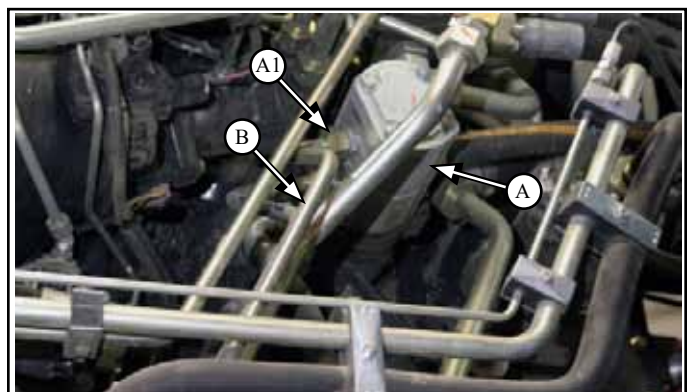


**4.1.6** Connect new hydraulic rubber hose (I) to line (E) at fitting (B2)  
 - HH112 Hydraulic Hose .625 x 148L (I)

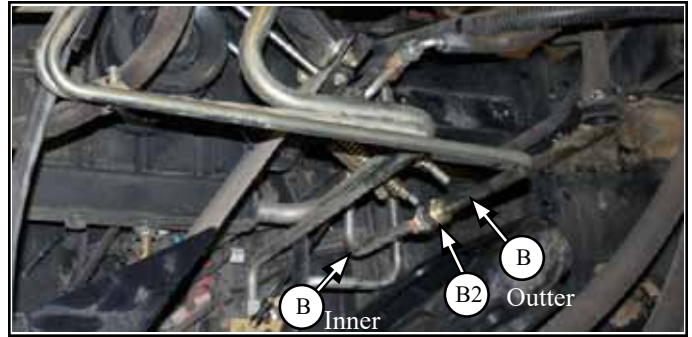
Some machines require adapter  
 - H28-1212 Fit Hyd Str 12 MORFS - 12 MORFS Qty 1



**4.1.7** Quickly disconnect steel hydraulic line (B) from pump (A) at fitting (A1)  
 - have a container ready to catch any hydraulic fluid that may leak out from the steel line (B) or pump (A)  
 - plug end of steel line removed or drain fluid in line after removing



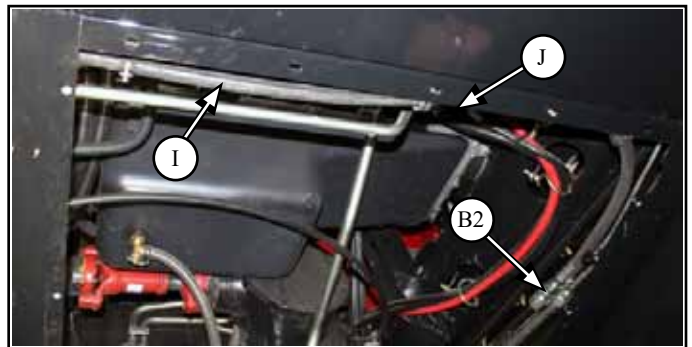
**4.1.8** Disconnect outer hydraulic steel line (**B**) from inner hydraulic steel line at fitting (**B1**)  
- not to be reused



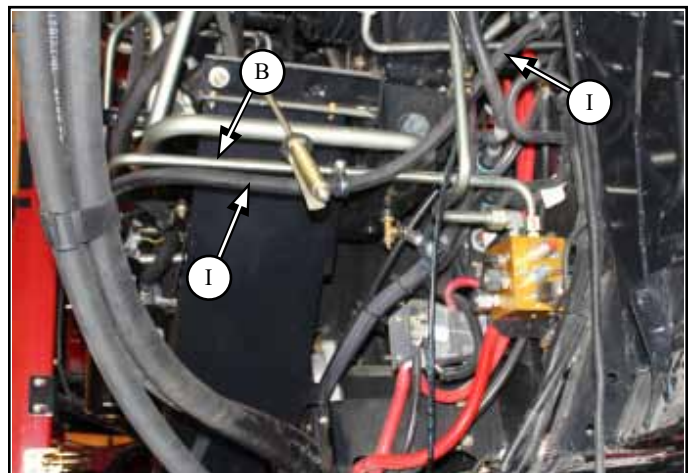
**4.1.9** Rotate inner hydraulic steel line (**B**) and pull through left combine side wall  
- not to be reused



**4.1.10** Place new hydraulic rubber hose (**I**) from connection (**B2**) up along upper access edge (**J**) to the outside thru left combine side wall hole (same direction as previous steel line)



**4.1.11** Place new hydraulic rubber hose (**I**) along the existing steel line (**B**) up to the pump (**A**)

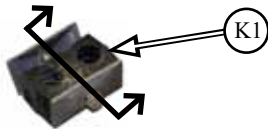


**4.1.12** Connect new hydraulic rubber hose (I) to pump (A) at fitting (A1)  
 - have a container ready to catch any hydraulic fluid that may leak out from the pump (A)

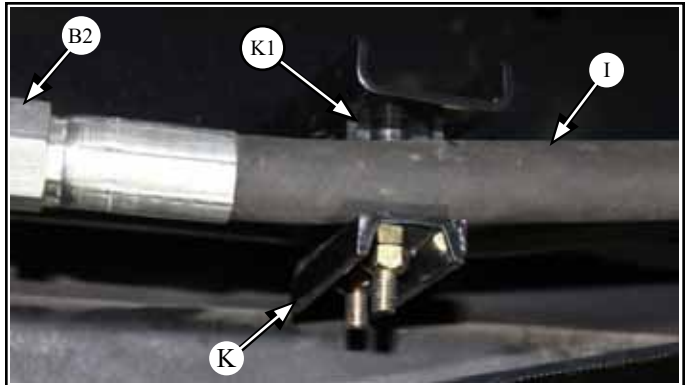


**4.1.13** Re-attach factory hose clamp bracket (K) to new hydraulic rubber hose (I) at connection (B2) in upper access

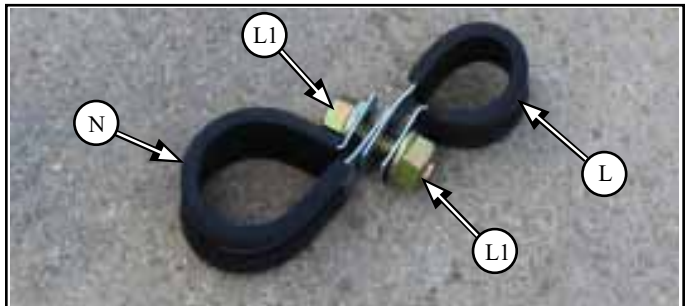
**4.1.13.1** Cut plastic (K1) in half from steel line hose clamp being replaced



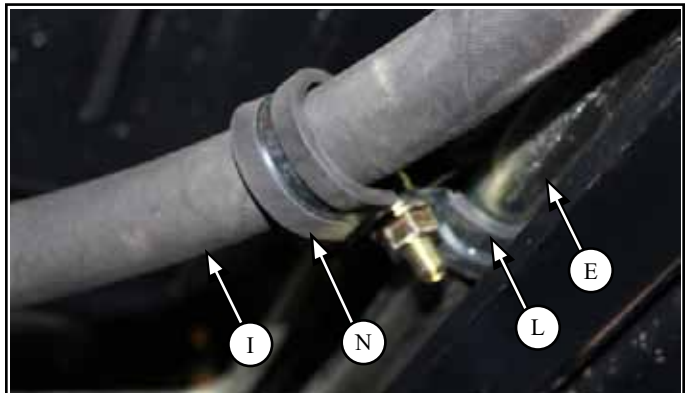
**4.1.13.2** Place over hose and in between steel clamp for hose protection



**4.1.14** Assemble hose clamp .75 (-12) (L) and 1.125 (-18) (N) together qty 4 with:  
 - M8 x 20 flange bolt and flange nut (L1) x4



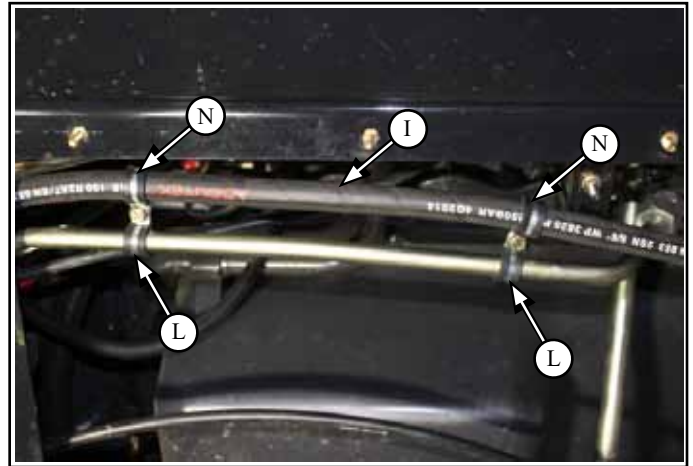
**4.1.15** In upper internal access area, install hose clamp assembly (N) onto hydraulic rubber hose (I) and secure clamp (L) to hydraulic steel line (E)



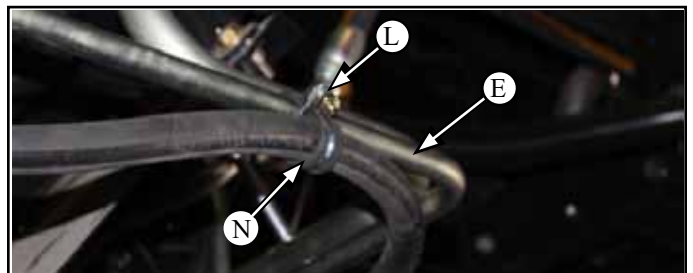
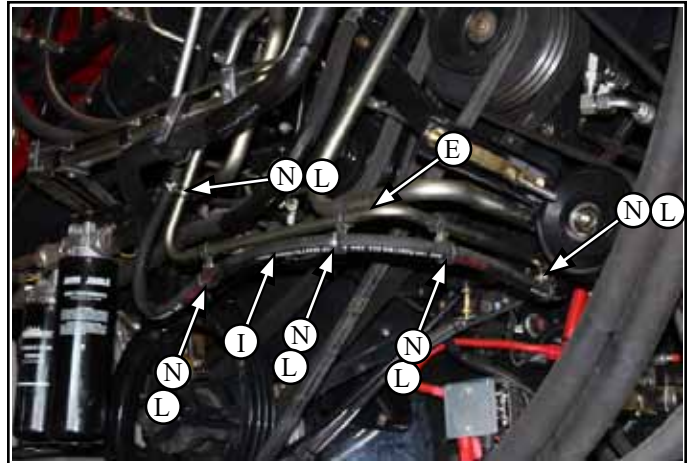
**4.1.15.1** Install 2 clamp assemblies at each corner (**J1**)



**4.1.16** Install hose clamp 1.125 (-18) (**N**) x2 onto hydraulic rubber hose (**I**)



**4.1.17** Install hose clamp assembly 1.125 (14) (**N**) x5 onto hydraulic rubber hose (**I**) and secure clamp .75 (12) (**L**) x5 to hydraulic steel lines (**E**)  
- ensure clamps are tight and hose is not rubbing on any moving parts

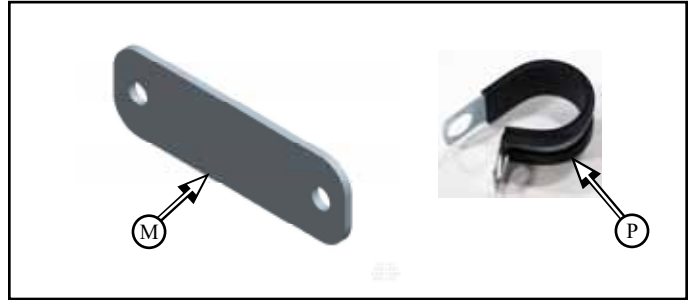


**4.1.19 Secure PTO Gearbox Return Tube**

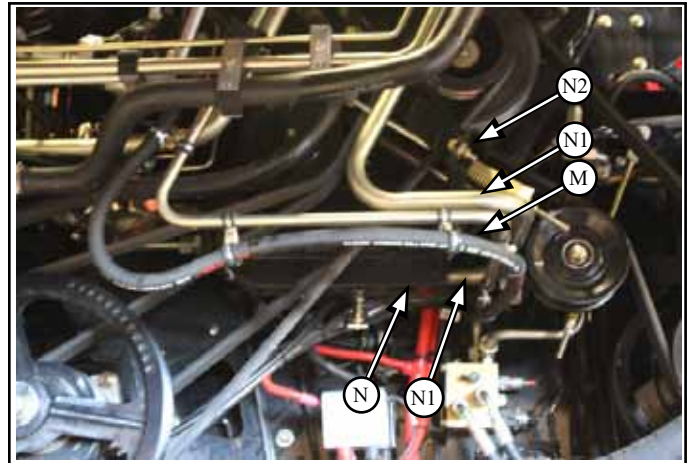
**Parts List:**

parts and hardware located in CS1132BS box / CS825S bag

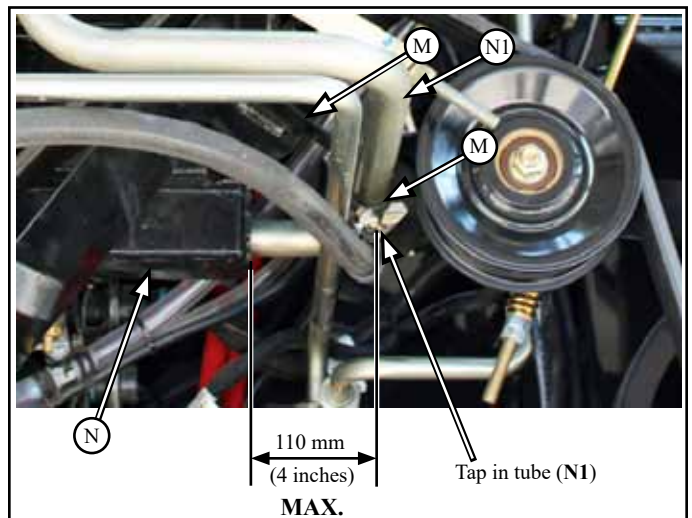
CS874Z	Strap AFX sump line <b>(M)</b>	Qty 1
H99-20	Hose Clamp 1.25 <b>(P)</b>	Qty 1



**4.1.19.1 Secure PTO Gearbox Return Tube (N1) to combine tensioner bracket (N2) with Strap (M)**



**4.1.19.2 Ensure PTO Gearbox Return Tube (N1) is 110mm (4 inches) max from PTO Reservoir (N) - tap tube (N1) into PTO Reservoir (N) as required (tube is held into reservoir by a pressure fit o-ring and can be pushed or pulled in or out of the reservoir easily)**

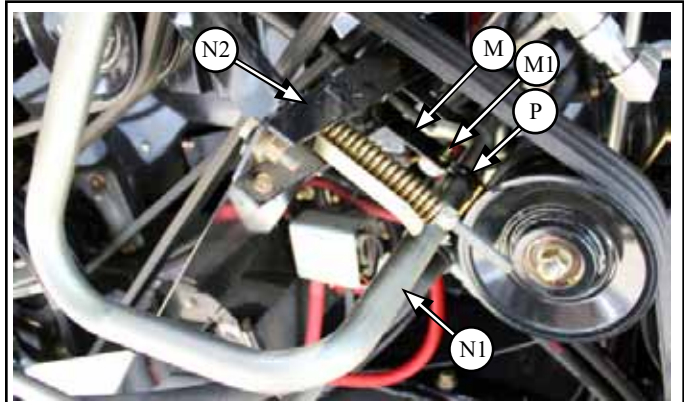


**4.1.19.3** Attach strap (**M**) to bottom of combine tensioner mount bracket (**N2**) with:

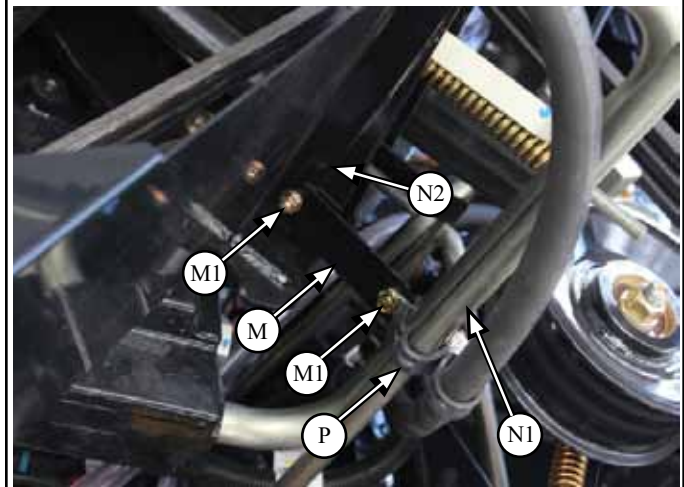
- M8 x 25 flange bolt and flange nut (**M1**)

**4.1.19.4** Attach hose clamp (-20) (**P**) to tube (**N1**) and fasten to clamp (**M**) with:

- M8 x 25 flange bolt and flange nut (**M1**)



View from above - looking down



View from below - looking up



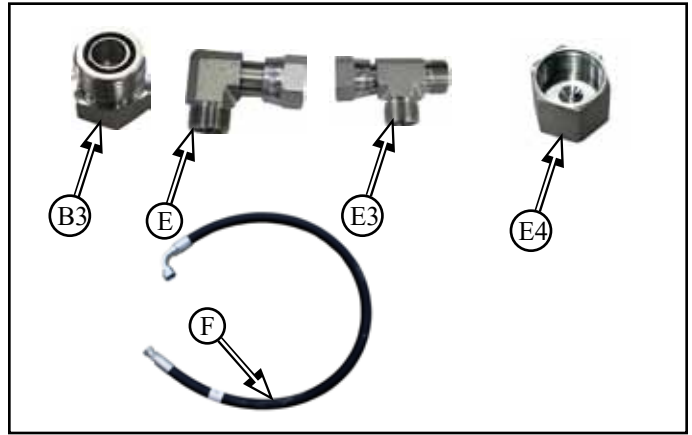
**4.2 Return Line Changes - if equipped with hydraulic knifebar valve (A)**

**\*\* This procedure is easiest when upper internal access panel is removed \*\***

**Parts List:**

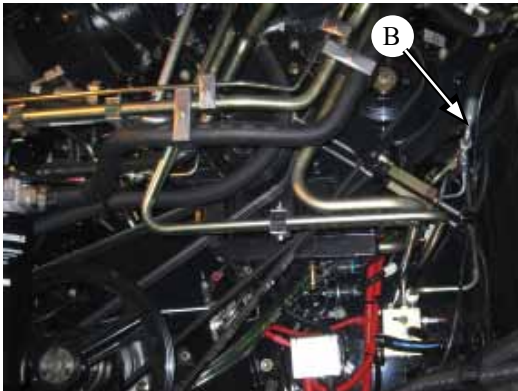
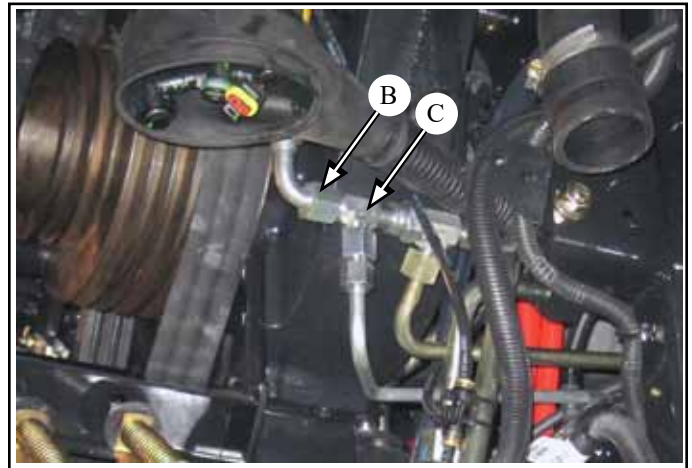
parts located in CS1135BSS box / CS1136S bag

H17-10	Fit Hyd Plug Hex 10 MORFS (B3)	Qty 1
H38-1010FFX	Fit Hyd 90deg 10 MORFS-10FORFSX (E)	Qty 3
H49-1010FOFS	Fit Hyd Tee 10 MORFS-10 MORFS (E3)	Qty 2
H14-10F	Fit Hyd Cap 10 FORS (E4)	Qty 1
HH114	Hydraulic Hose .5 x 57L (F)	Qty 1

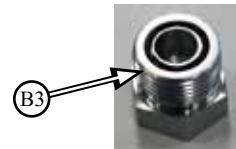


**4.2.1 Disconnect hydraulic hose (B) from tee fitting (C)**

- have pail ready to catch oil flow from disconnected hose - **LARGE FLOW!!**
- Use Vacuum on Hydraulic Tank to Reduce Oil Flow



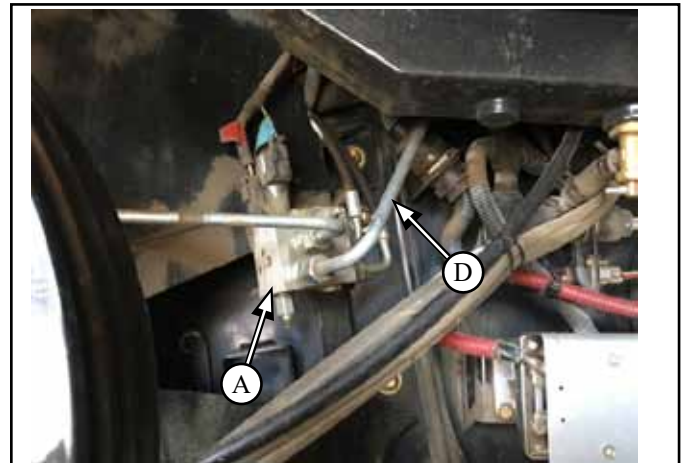
**4.2.1.2 Insert new hydraulic cap (B3) into hydraulic hose (B) just disconnected to stop oil flow from hydraulic reservoir tank**



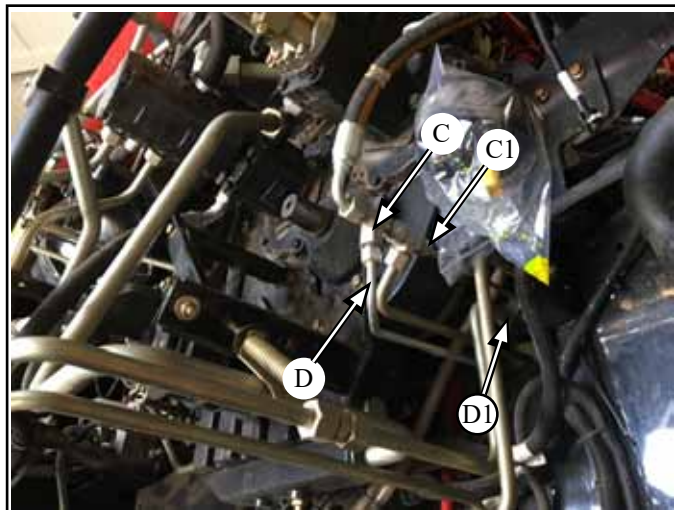
**4.2.2 Disconnect steel hyd line (D) from knifebar valve (A)**

- have pail ready to catch oil flow from hyd line (D)

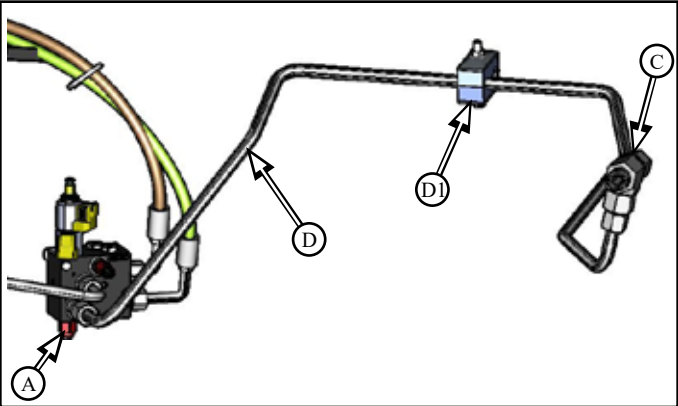
**4.2.2.1 Drain steel hyd line (D)**



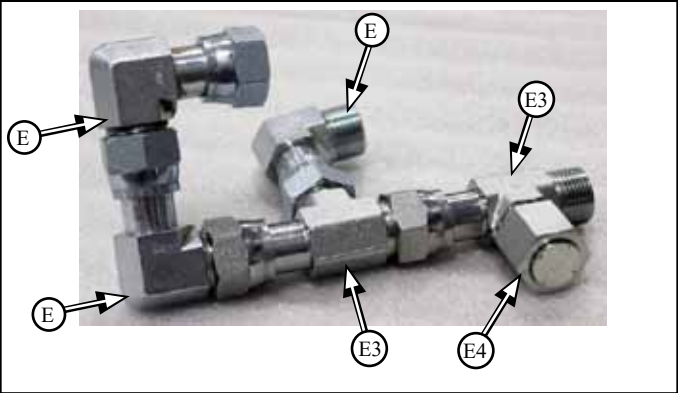
- 4.2.3 Disconnect steel hyd line (D) from tee fitting (C)
- 4.2.4 Remove hose clamp (D1) from steel hyd line (D)
- 4.2.5 Remove steel hyd line (D)  
- not to be reused
- 4.2.6 Disconnect tee fitting (C) from hyd line/fitting (C1)



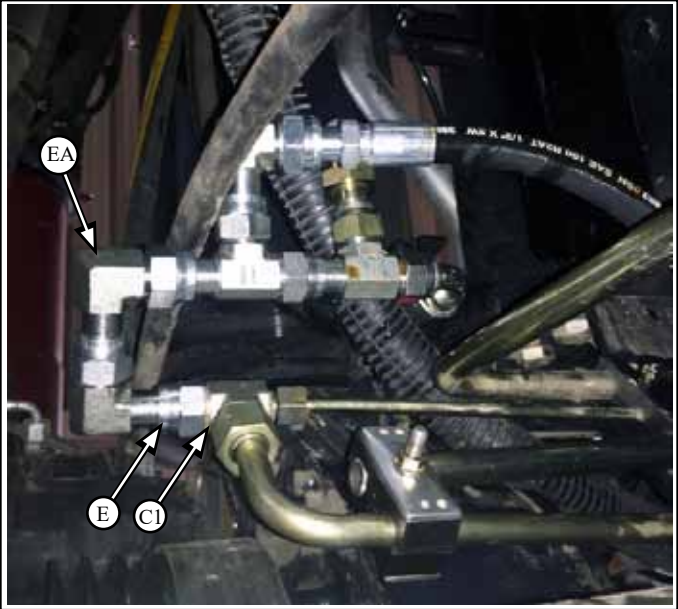
Reference illustrating hydraulic steel tube (D) being removed



4.2.7 Assemble hydraulic fittings into configuration as shown (EA)

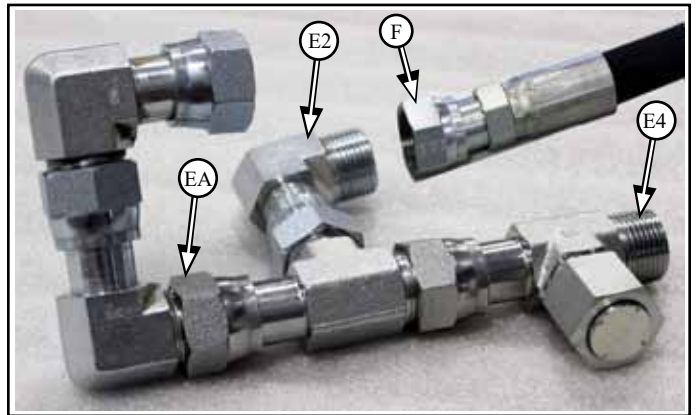
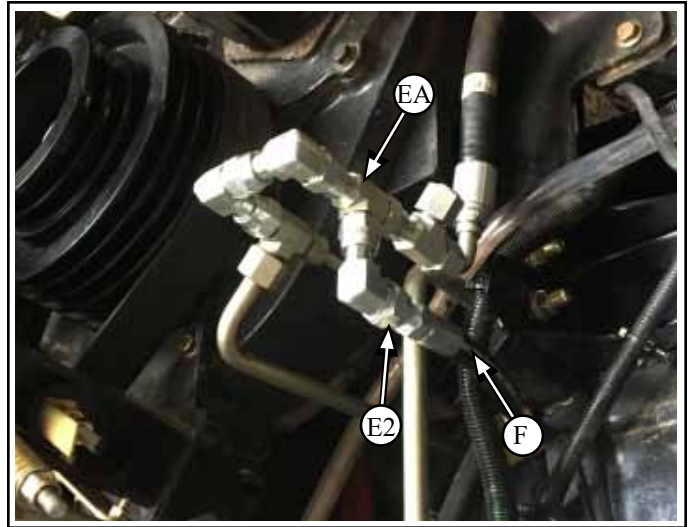


4.2.8 Connect new hydraulic fitting assembly (EA) end (E) to hyd line/fitting (C1)



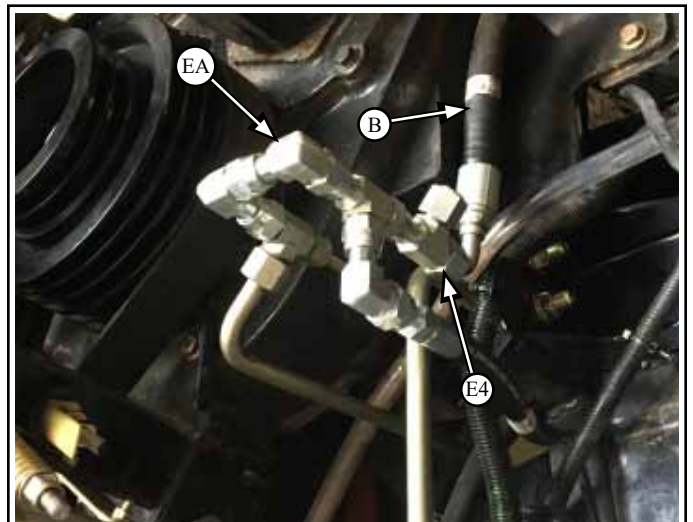
**4.2.9** Connect new hydraulic rubber line (F) to new hydraulic fitting assembly (EA) at end (E2)

**4.2.9.1** Connect new hydraulic rubber line (F) to hydraulic knifebar valve (A)  
- use same routing as hydraulic steel line (D) just removed



**4.2.10** Connect hydraulic hose (B) from reservoir tank to new hydraulic fitting assembly (EA) at end (E4)  
- quickly remove plug (B1) from end of hose (B) and connect to minimize oil leakage

**4.2.10.1** Orientate fittings (EA) in line with belt

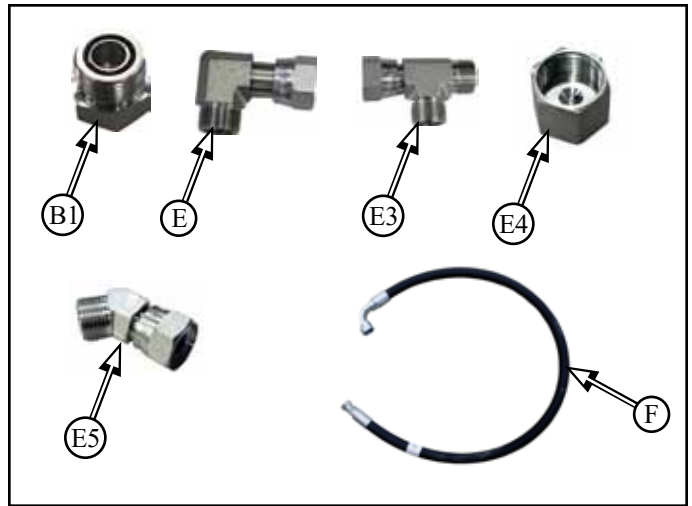


**4.3 Return Line Changes - if NOT equipped with hydraulic knifebar valve (A) (Relocation of reservoir hydraulic line)**

**Parts List:**

parts located in CS1135BSS box / CS1136S bag

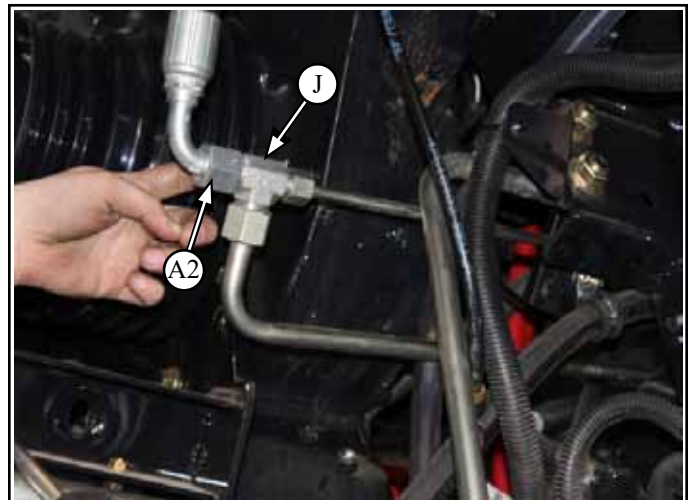
H17-10	Fit Hyd Plug Hex 10 MORFS (B1)	Qty 1
H38-1010FFX	Fit Hyd 90deg 10 MORFS-10FORFSX (E)	Qty 2
H49-1010FOFS	Fit Hyd Tee 10 MORFS-10 MORFS (E3)	Qty 1
H14-10F	Fit Hyd Cap 10 FORS (E4)	Qty 1
HH114	Hydraulic Hose .5 x 57L (F)	Qty 1
H33-1010FFX	Fit Hyd 45deg 10 MORFS x 10 FORFS (E5)	Qty 1



**4.3.1 Disconnect factory hydraulic line (A2) from tee fitting (J)**

- have oil pail ready - **LARGE FLOW!!**

**4.3.1.1 Install hydraulic plug (B1) into end of hose (A2) to stop oil flow**



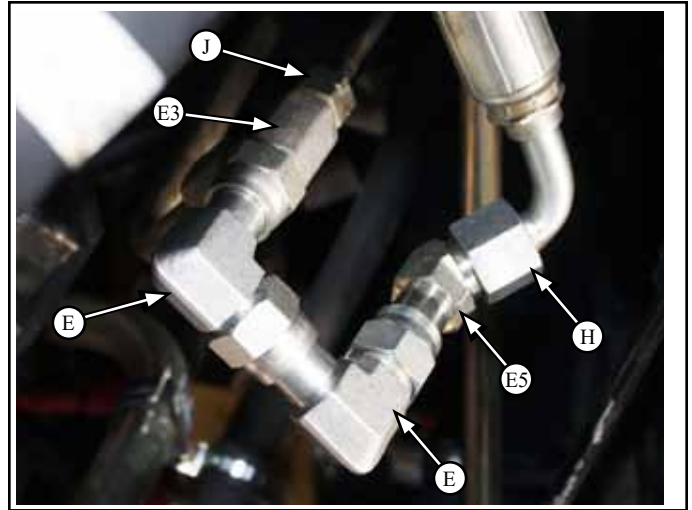
**4.3.2** Connect hydraulic line (J) to tee fitting (E3)  
- rotate fittings down and to clear V Belt

**4.3.3** Connect hydraulic tee fitting (E3) to 90 degree fitting (E)

**4.3.4** Connect hydraulic 90 degree fitting (E) to 90 degree fitting (E)

**4.3.5** Connect hydraulic 90 degree fitting (E) to 45 degree fitting (E5)

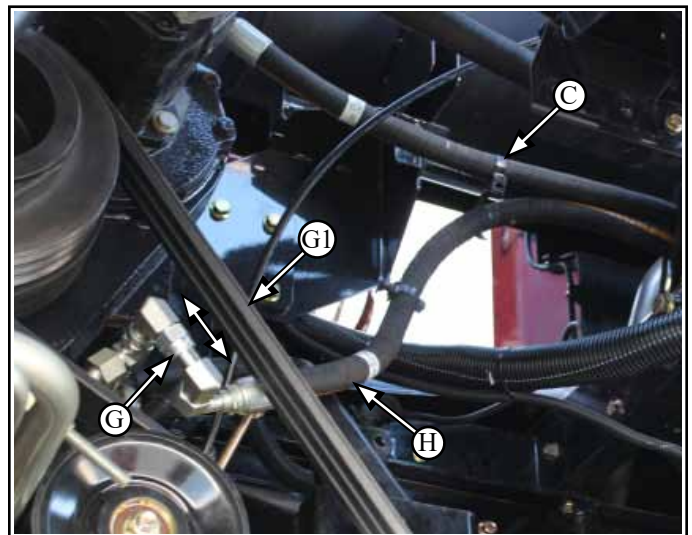
**4.3.6** Connect hydraulic hose (H) to 45 degree fitting (E5)



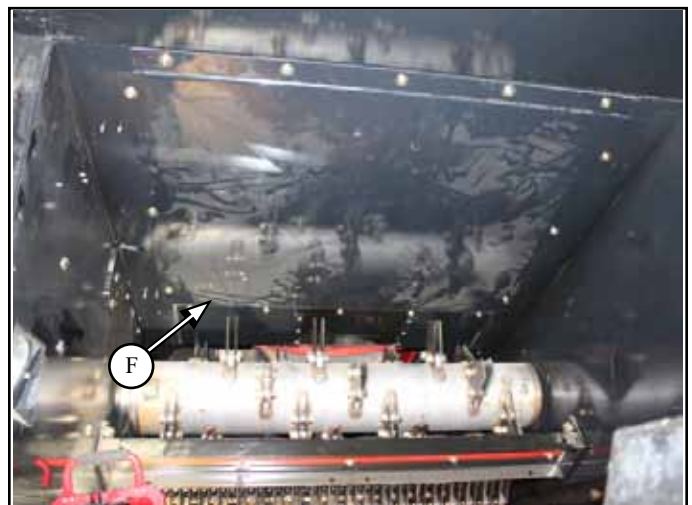
**4.3.7** Ensure all connections are tight

**4.3.7.1** Orientate fittings (G) in line with belt (G1)

**4.3.8** Secure hydraulic hose (H)  
- use tie straps and tube clamps



**4.3.9** Reinstall upper access panel (F) with existing CASE Hardware



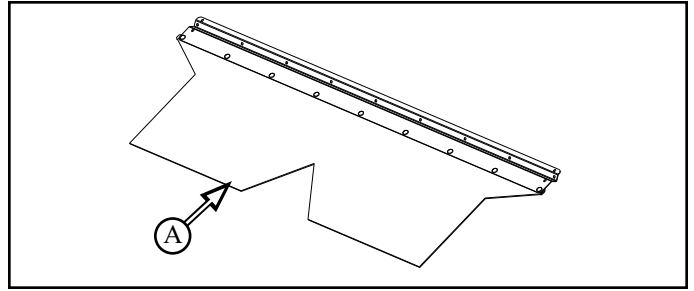
## 5 Sieve Extension Installation

If SCU is being installed, reference SCU Installation Manual

### Parts List:

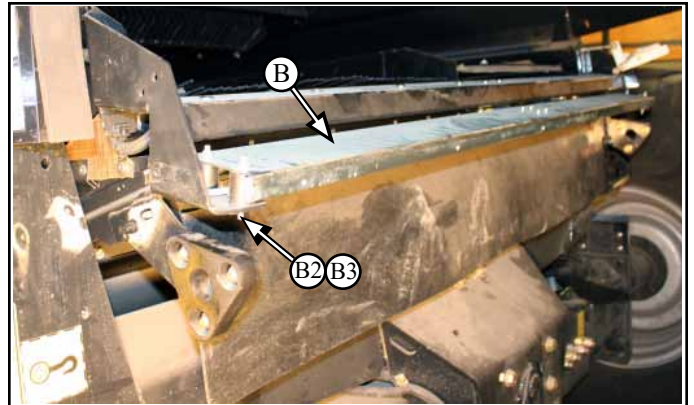
parts located on pallet

CS1095BA Sieve Extension Assy AFX (A) Qty 1

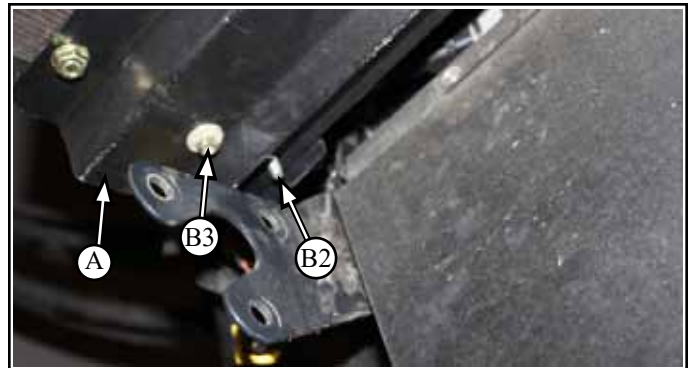


**5.1** Remove existing nuts and flat washers (B3) x4 from bottom of grain loss monitor pan (B)

**5.2** Install sieve extension assembly (A) to the bottom of grain loss monitor pan (B) on to existing bolts (B2)



**5.3** Use existing flat washers and nuts (B3) x4 to mount to the existing bolts (B2) through the grain loss monitor pan (B) (2 on each side)



**5.4** Installed sieve extension (A) view



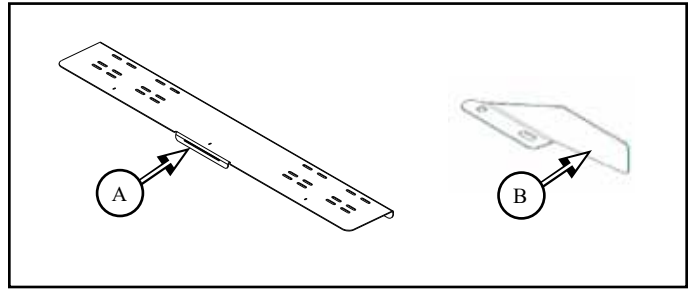
## 6 Chaff and Internal Deflectors

### 6.1 Internal Deflector Installation

#### Parts List:

parts located on pallet and CS1130BS box  
hardware located in CS625S bag

CS1120B	Internal Baffle Mount Plate (A)	Qty 1
CD733B	Internal Fin (B)	Qty 2

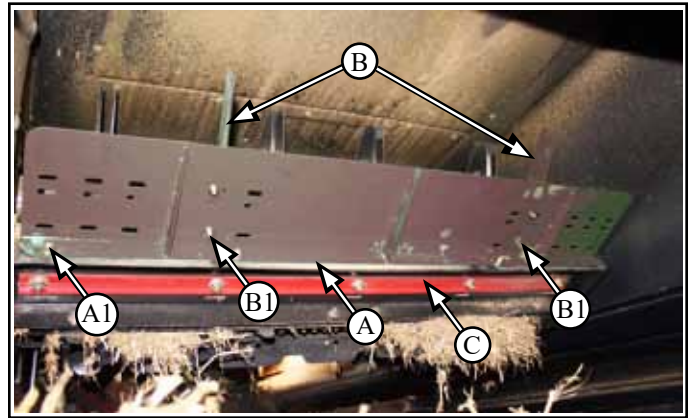


**6.1.1** Mount baffle mount plate (A) flush with top of pan (C) with:

- M10 x 20 flange head bolt and flange nut (A1) x4

**6.1.2** Mount deflector fins (B) onto top of mounting plate (A) with:

- M8 x 16 round head bolt and flange nut (B1) x4





## INTERNAL DEFLECTOR SETTING

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

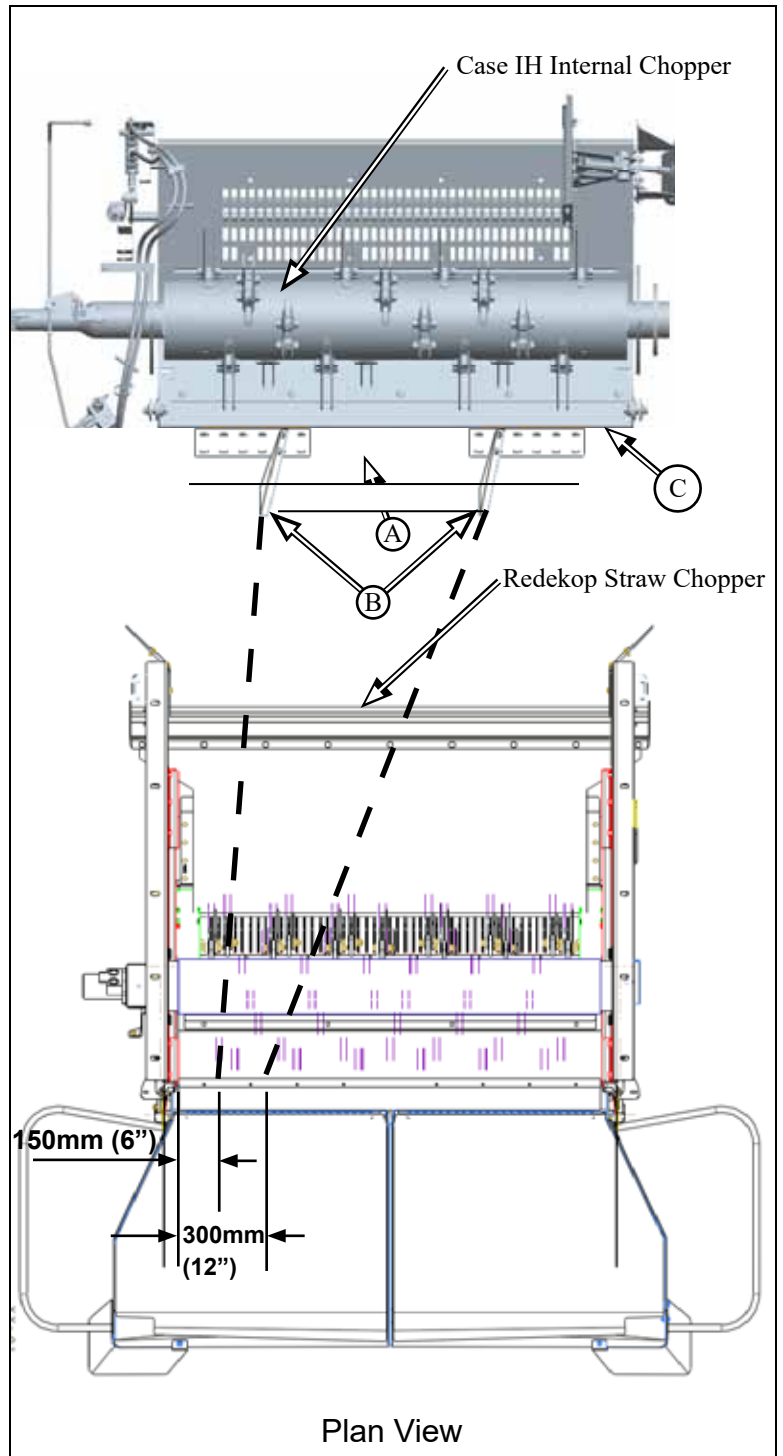
**6.1.3** Adjust angle of deflector fins (**B**) starting with deflectors set as shown:

- position left deflector aimed 150mm (6") inwards to left rear of chopper
- position right deflector aimed 300mm (12") inwards to left 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

**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.

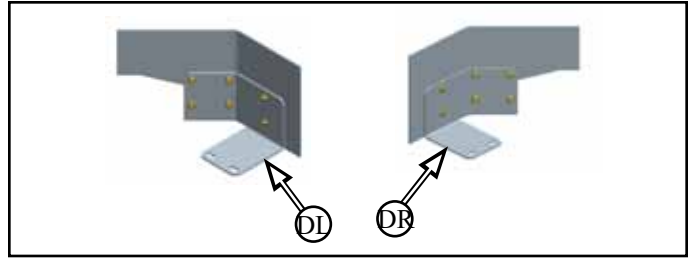


## 6.2 Chaff Deflector Installation

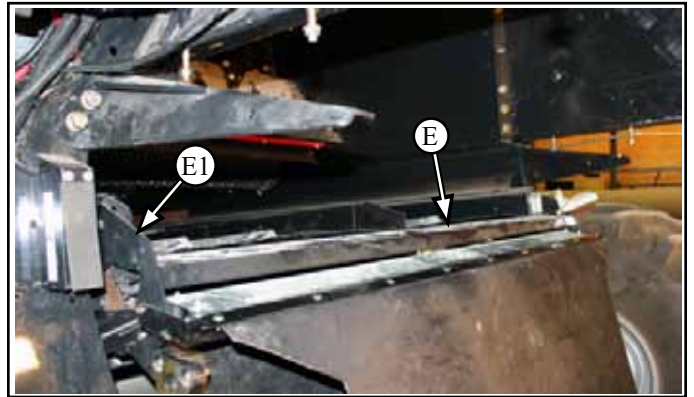
### Parts List:

parts located in CS1130BS box  
hardware located in CS625S bag

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

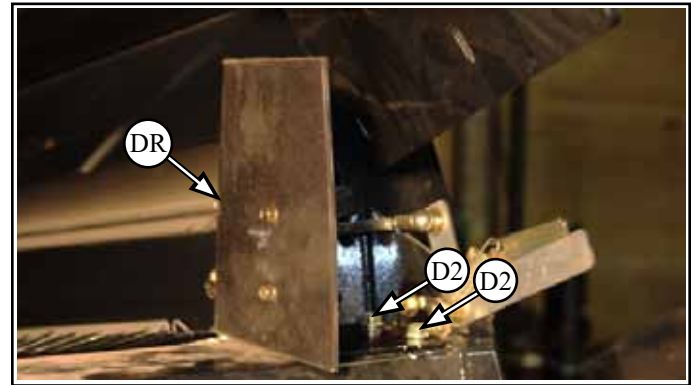


**6.2.1** Place each deflector (**DL & DR**) at each end of the sieve (**E**)

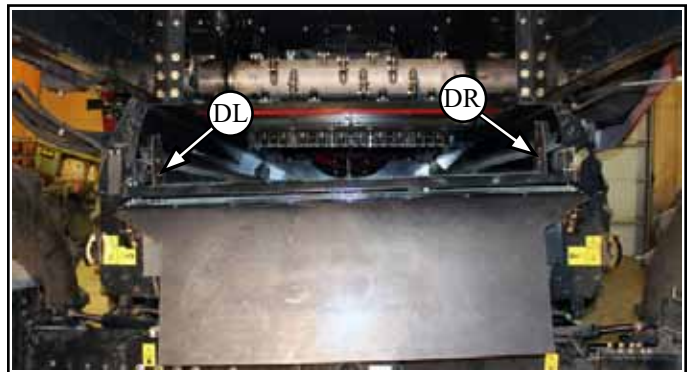


**6.2.5** Attach bottom of Deflector (**DR**) into existing holes with:

- M8 x 25 flange bolts and flange nuts (**D2**) x2
- both sides



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

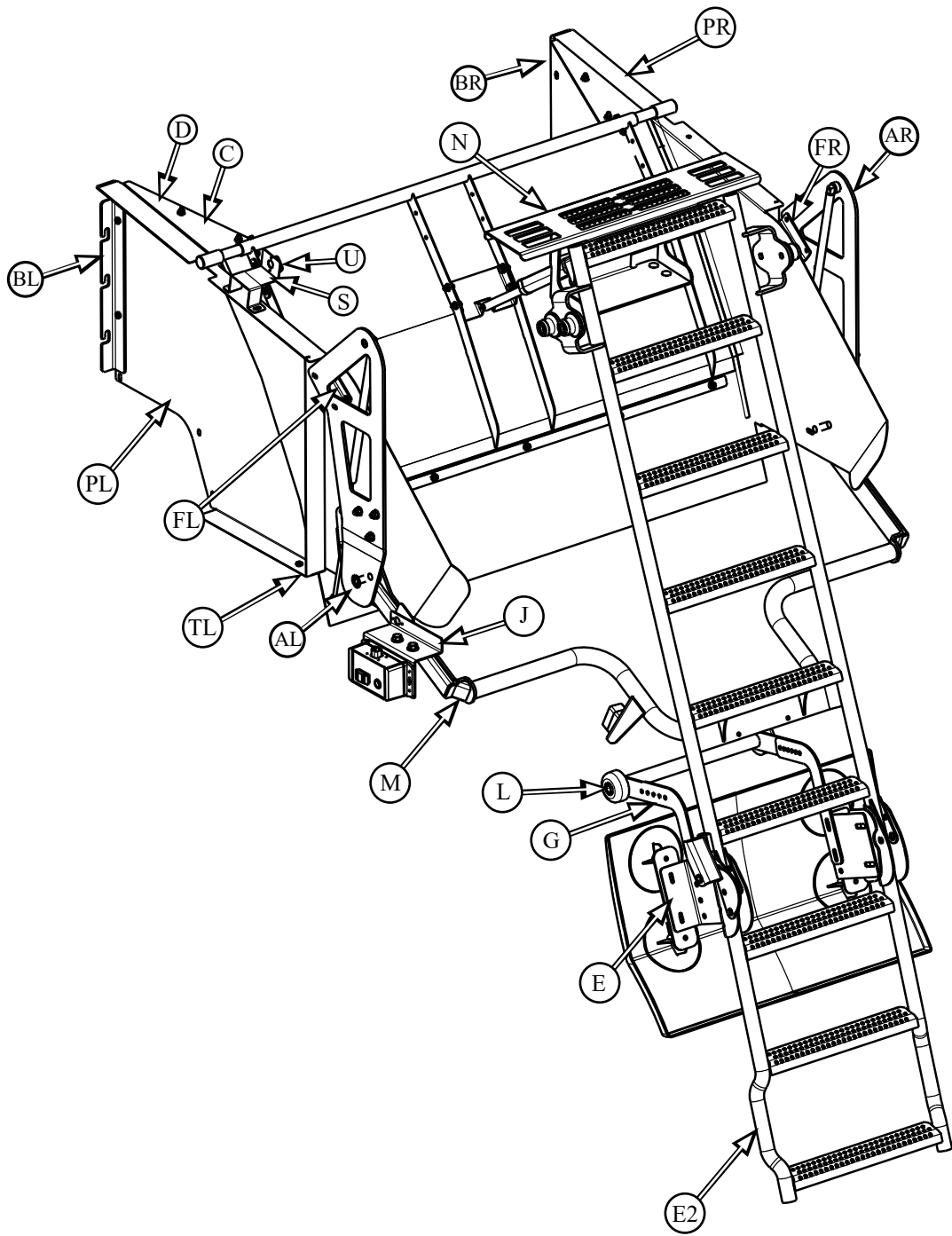


## 7 AFX Ladder Installation

### Ladder Installation Kit Overview

#### Parts List:

CS1008BL	Plate Ladder Mount Left <b>(AL)</b>	Qty 1	CS1008BR	Plate Ladder Mount Right <b>(AR)</b>	Qty 1
CS1085BL	Brkt Front Subwall Mount Left <b>(BL)</b>	Qty 1	CS1085BR	Brkt Front Subwall Mount Right <b>(BR)</b>	Qty 1
CS669	Belt Roof Seal <b>(C)</b>	Qty 2	CS468B	Roof Filler Plate <b>(D)</b>	Qty 2
CS1084BR	Bracket Ladder Handle Mount Right <b>(E)</b>	Qty 2			
CS944BL	Bracket Top Skin Mount Right <b>(FL)</b>	Qty 1	CS944BR	Bracket Top Skin Mount Left <b>(FR)</b>	Qty 1
CS949BA	Plate Ladder Handle AFX <b>(G)</b>	Qty 2	CS1154B	Plate Ladder Handle Side <b>(J)</b>	Qty 1
CS950BA	Handle Ladder AFX Assy <b>(L)</b>	Qty 1	CS927B	Ladder Lift Arm Lever <b>(M)</b>	Qty 1
CS1086B	Step Top Ladder <b>(N)</b>	Qty 1			
CH649BL	Skin Ladder AFX Left <b>(PL)</b>	Qty 1	CH649BR	Skin Ladder AFX Right <b>(PR)</b>	Qty 1
CS851B	Bracket Door Prox Sensor <b>(S)</b>	Qty 1			
CS945BR	Deflector Chaff Lt <b>(TL)</b>	Qty 1	CS945BL	Deflector Chaff Rt <b>(TR)</b>	Qty 1
CS943B	Target Straw Door Proximity <b>(U)</b>	Qty 1			



## 7.1 Ladder Mount Installation

### Parts List:

parts located in CS1131BS box  
hardware located in CS859S bag

CS1008BL	Plate Ladder Mount Left ( <b>AL</b> )	Qty 1
CS1008BR	Plate Ladder Mount Right ( <b>AR</b> )	Qty 1
CS944BL	Bracket Top Skin Mount Left ( <b>FL</b> )	Qty 1
CS944BR	Bracket Top Skin Mount Right ( <b>FR</b> )	Qty 1

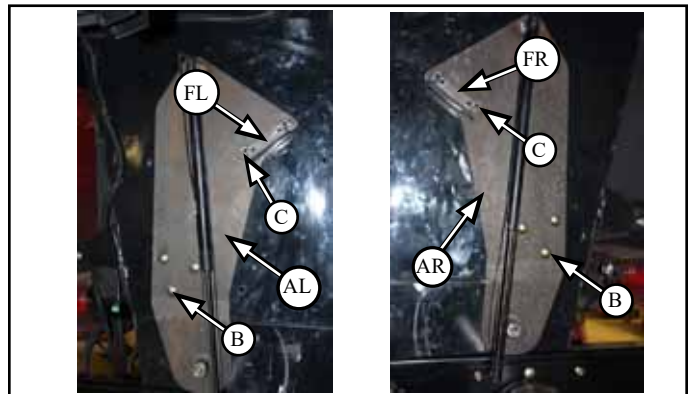
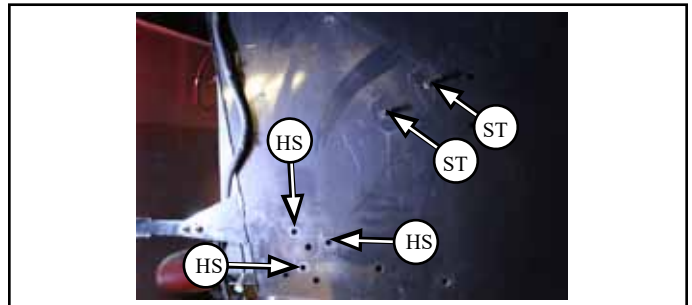
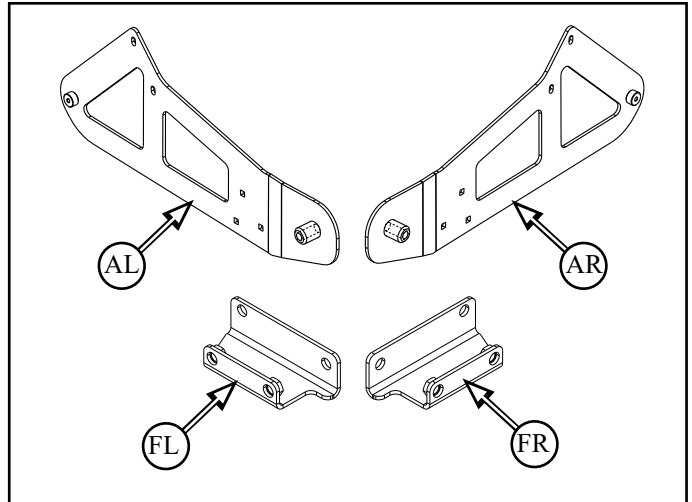
**7.1.1** Install left ladder mount (**AL**) to the inner left side combine wall (def tank side) with:

- use the existing two wall studs (**ST**)
- line up the three holes (**HS**) on plate to holes in wall
- M10 x 25 round head bolt (**B**) x3
- M10 flange nut (**C**) x3

**7.1.2** On upper side of bracket (**AL**) use existing studs and M10 Flange Nut (**C**) x2

- M10 flange nut (**C**) x2

**7.1.3** Repeat for right side (fuel tank side)



### 7.1.4 CASE AFX 120 Series Roof Upgrade:

#### NOTE: AFX 120 Series Only

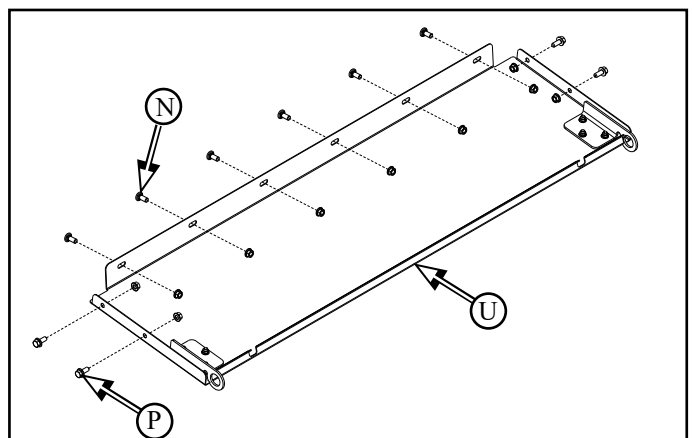
Parts located in CS961K Kit - order if needed

### Parts List:

CS961BA	AFX 120S Roof Upgrade ( <b>U</b> )	Qty 1
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- Remove Factory Straw Hood and Install the AFX 120'S Roof Upgrade Assembly (**U**) with:

- M10 x 25 round head bolt and flange nut (**N**) x6
- M10 x 25 flange bolt and flange nut (**P**) x4



## 7.2 Bracket Front Subwall Mount Installation

### Parts List:

parts located in CS1131BS box  
hardware located in CS859S bag

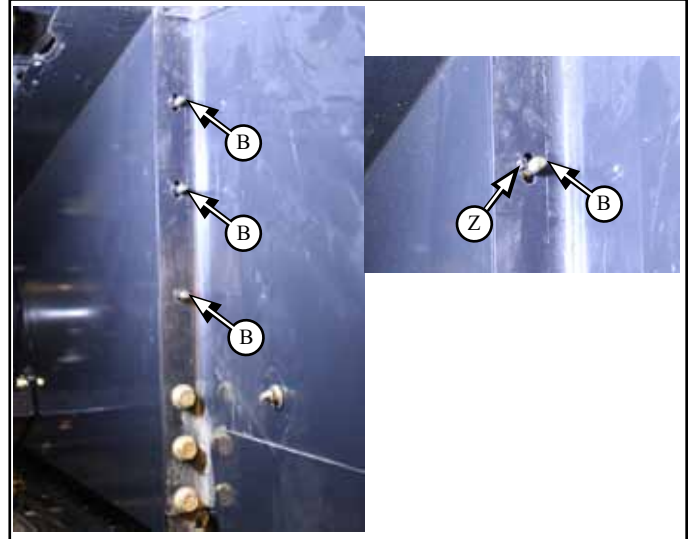
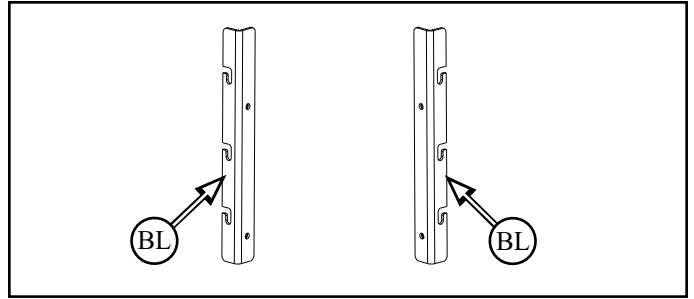
CS1085BL Bracket Front Subwall Mount Left (**BL**) Qty 1  
CS1085BR Bracket Front Subwall Mount Right (**BR**) Qty 1

**7.2.2** Mount Bracket (**BL**) to the front corner of combine wall. Use:

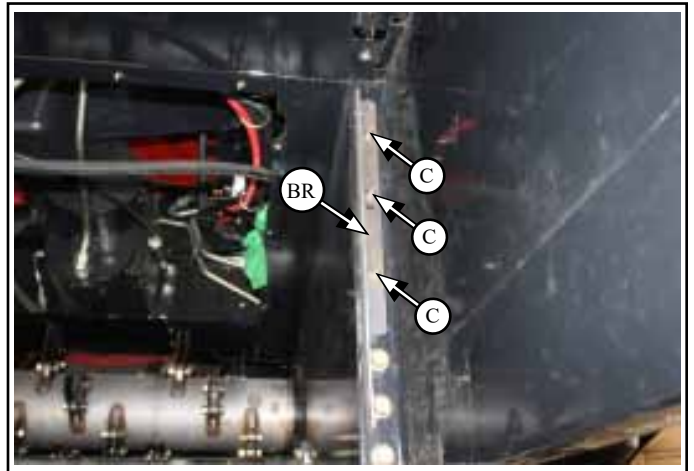
- Re-use existing hardware from spreader disassembly
- M10 x 25 round head bolt (**B**) x3
- M10 flange nut (**C**) x3
- Use Zip Ties (**Z**) to hold bolts (**B**) x3 in place
- Loosen Nuts and slide bracket (**BL**) in place



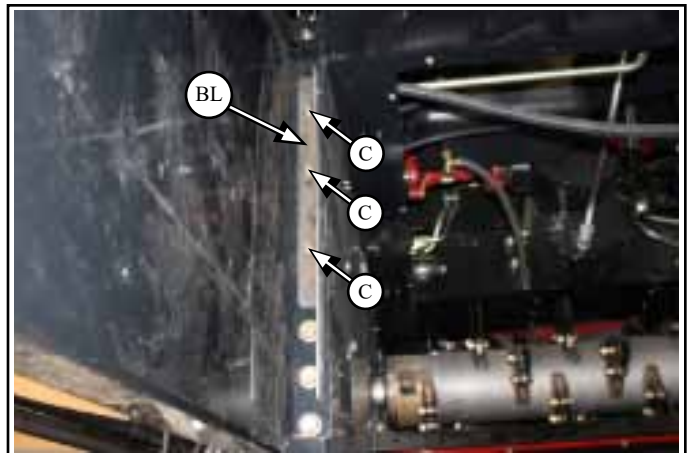
**Do not push bolts (B) out from the back panel - leave them inserted**  
**There is no access on the fuel tank side to replace bolts**



**7.2.3** Tighten nuts (**C**)



**7.2.4** Repeat procedure for right front subwall mount bracket (**BR**) on right side of combine wall



### 7.3 Ladder Lift Arm Lever Installation

#### Parts List:

parts located on pallet and CS1131B box  
hardware located in CS859S bag

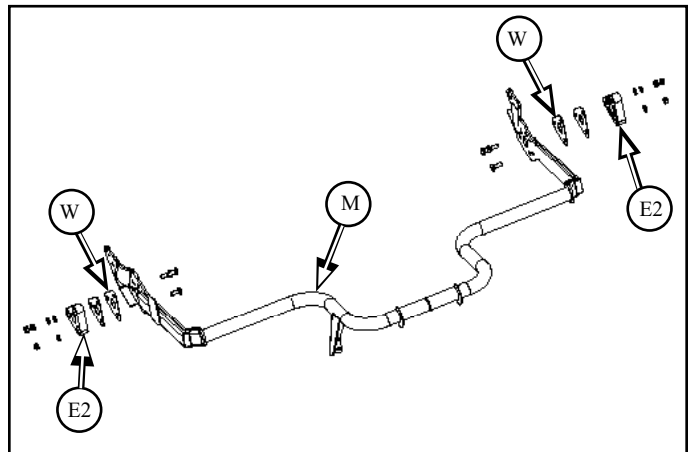
CS927B	Ladder Lift Arm Lever ( <b>M</b> )	Qty 1
CS934Z	Bolt Ladder Skin ( <b>V</b> )	Qty 2
CS935Z	Washer Ladder Frame ( <b>O</b> )	Qty 2
CS976-01	Ladder Shim Plate ( <b>W</b> )	Qty 4

Reuse:

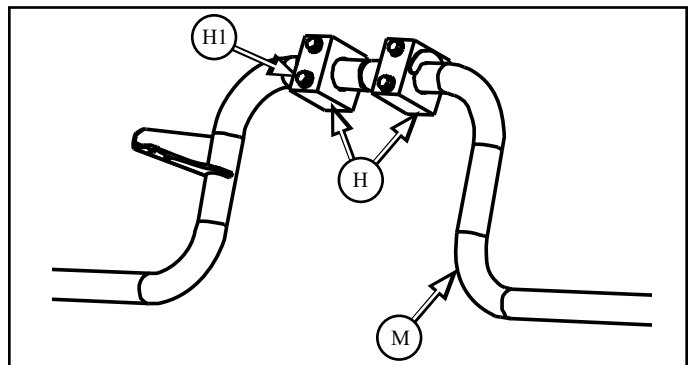
- 87105202 Pivot Tube Blocks (**K**)
- 87630671 Pivot Blocks (**E2**)



**7.3.1** Install shims (**W**) between pivot tube blocks (**E2**) to the outside of ladder lever arms (**M**) with:  
- Reuse: M10 X 30 Bolts, Nuts and Washers

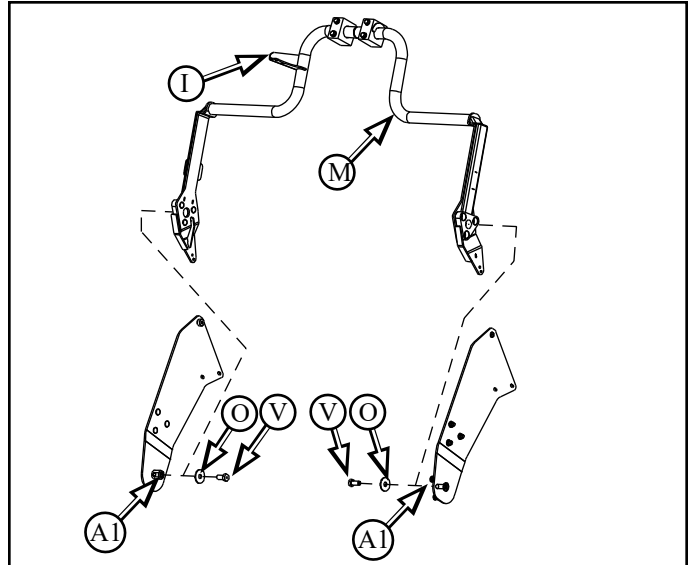


**7.3.1** Install the factory pivot blocks (**H**) (Section 3.3.1 from Removal Guide) on the ladder lift arm (**M**) with:  
- M8 x 90 flange head bolts and flange nuts (**H1**) x4



**7.3.2** Lift the ladder lift arm lever (**M**) and connect it onto ladder mount pins (**A1**) with:

- Washer Ladder Frame (**O**) x2
- Bolt Ladder Skin (**V**) x2
- Reuse CNH Ladder Latch (**I**)



**7.3.3** Ladder lift arm lever (**M**) view



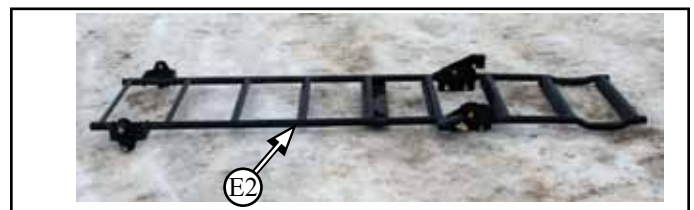
## 7.4 Factory Ladder Installation

### Parts List:

CS836B      Bracket Ladder Rail Extension (**L**)      Qty 2



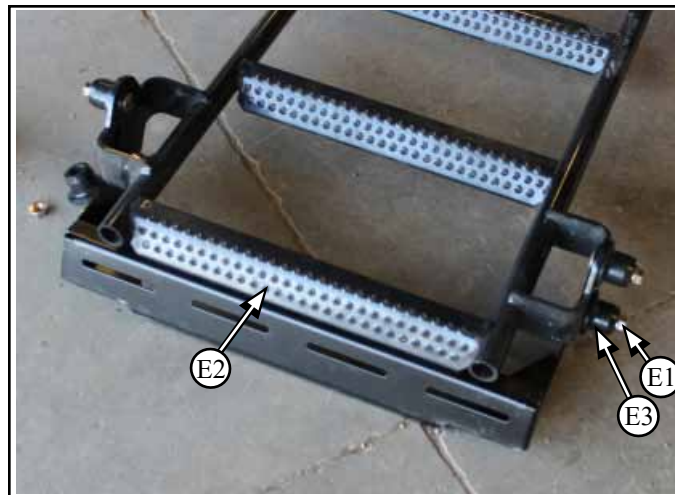
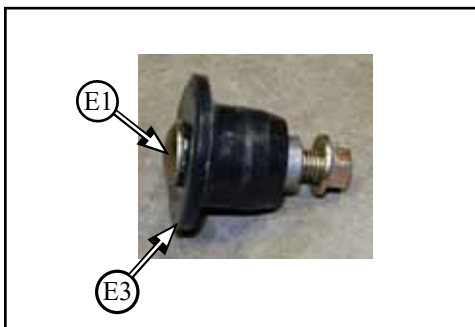
**7.4.1** Find factory ladder (**E2**) from (Section 3.3.2 from Removal Guide)





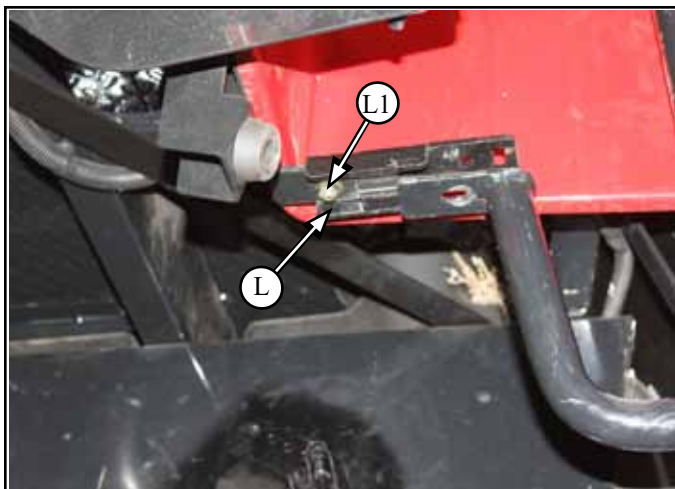
**7.4.2** Re-assemble factory rollers (**E3**) to the ladder (**E2**) with existing hardware:

- M10 x 40 round head bolt and flange nut (**E1**) x4



**7.4.3** Install extension bracket (**L**) cup side down, over bottom rail mount tab with existing hardware:

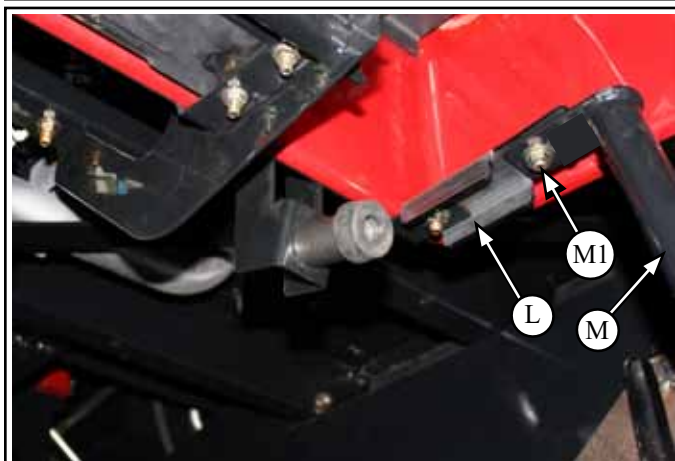
- M10 x 25 flange bolt and flange nut (**L1**)



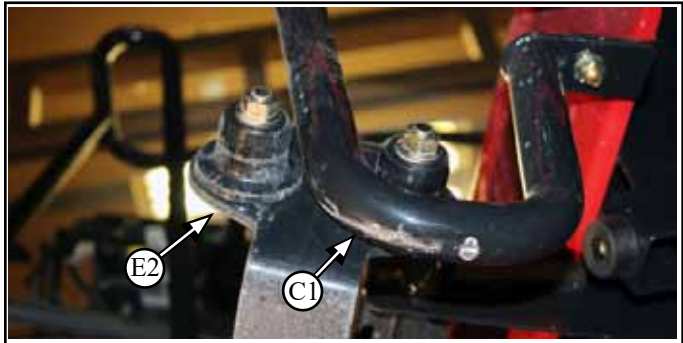
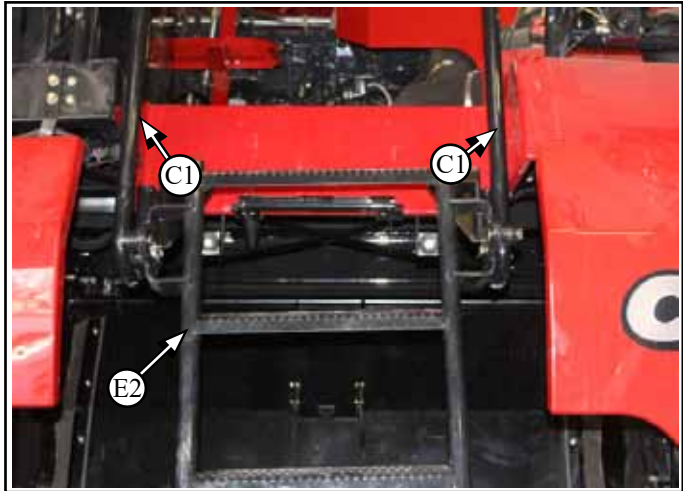
**7.4.3.1** Attach ladder rail (**M**) to underside of extension bracket (**L**) with:


- M8 x 25 flange bolt and flange nut (**M1**) x1
- do not tighten at this stage

**7.4.3.4** Repeat for other side



**7.4.5** Slide factory ladder (**E2**) in between pivot tubes (**C1**)  
 - ensure it slides smoothly up and down along the pivot tubes (**C1**)



 **Not Required for MY17 & Current Machines**  
 Holes are in Machine  
 Step 7.5

**7.5 Straw Door Linkage Bracket Installation**

**Parts List:**

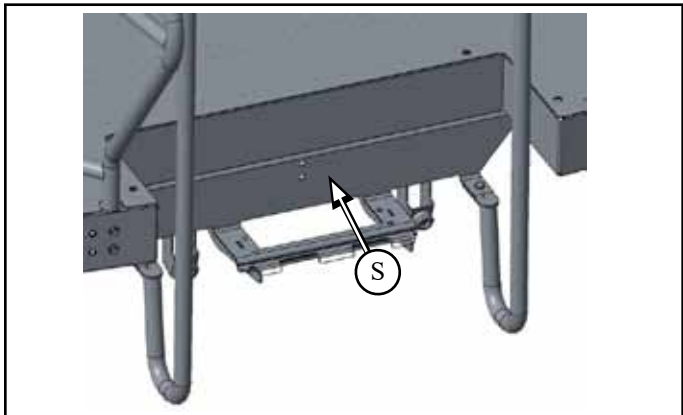
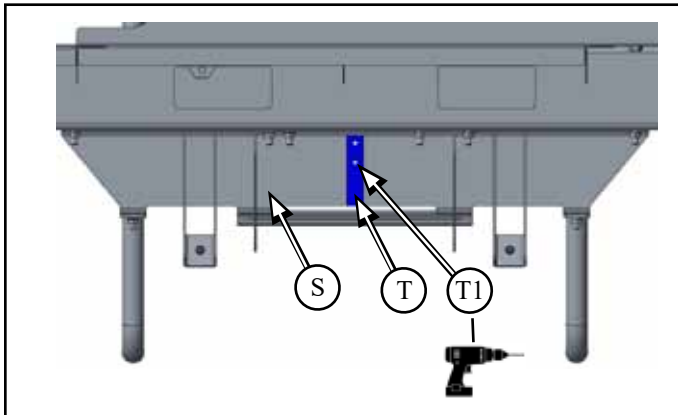
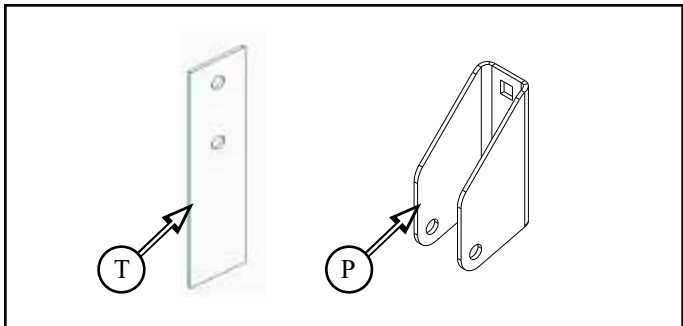
parts located in CS1135BS box  
 hardware located in CS859S bag

84127251\_Template (**T**) Qty 1  
 CS1012Z Straw Door Clevis (**P**) Qty 1

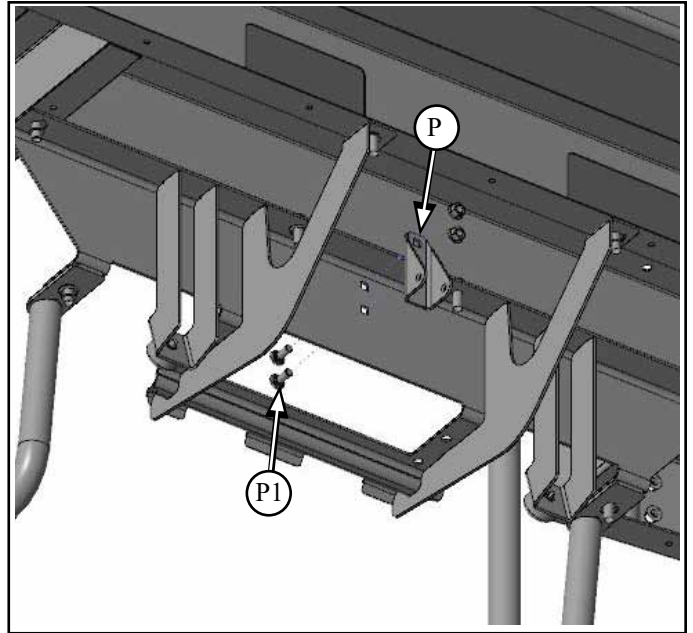
**7.5.1** Center template (**T**) on the back side of the step mount frame (**S**).

**7.5.1.1** Mark the hole locations

**7.5.1.2** Drill 10mm (3/8") holes (**T1**) x2



**7.5.2** Install straw door linkage bracket (**P**) to back side of step mount frame (**S**) through holes just drilled with:  
 - M8 x 20 flange bolt and flange nut (**P1**) x2

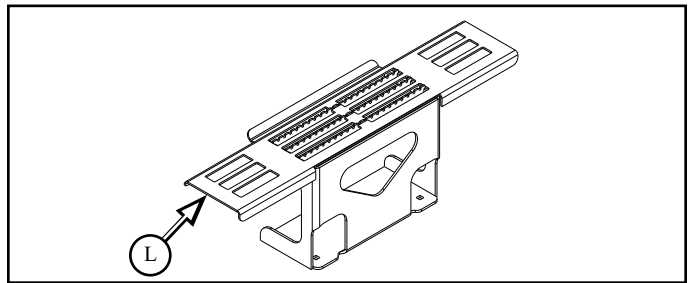


**7.6 Top Ladder Step Installation**

**Parts List:**

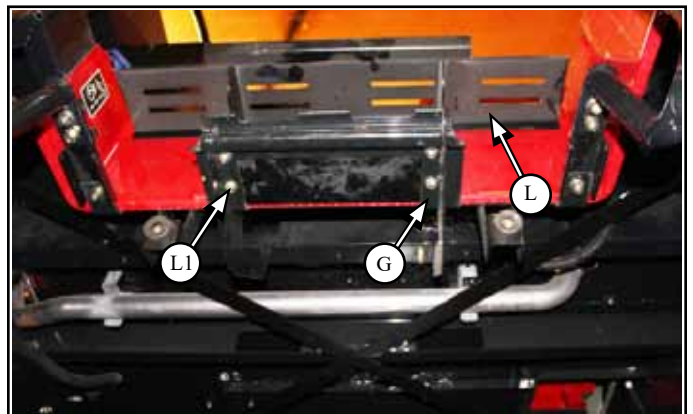
parts located in CS1131S box  
 hardware located in CS859S bag

CS1086B      Step Top Ladder (**L**)      Qty 1



**7.6.1** Install top ladder step (**L**) on upper flange of brackets (**G**) with:

- M10 x 25 round head bolt and flange nut (**L1**) x4
- insert bolts from above

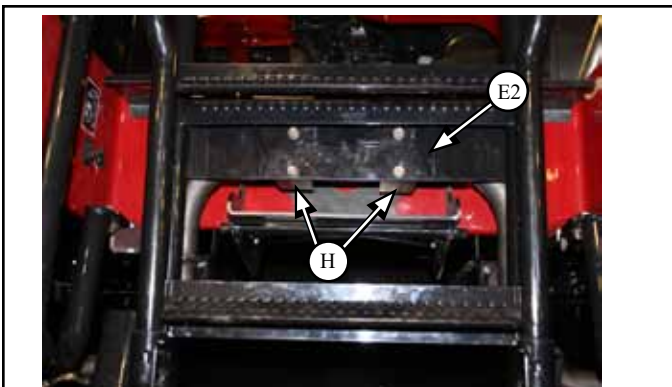
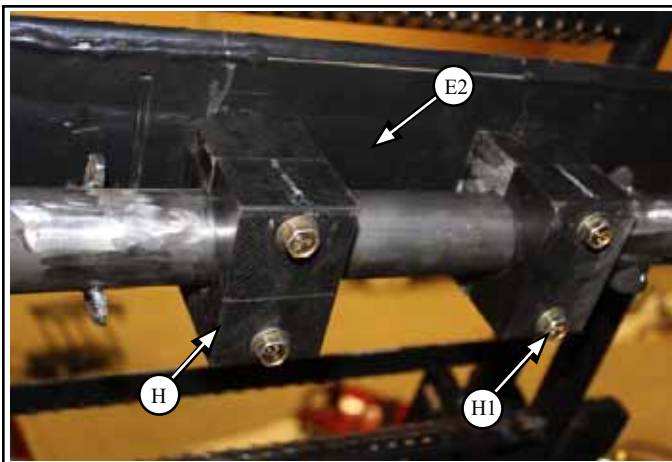


**7.6.2 Bolt Factory Pivot Block Assembly (H) onto factory Ladder (E2)**

Reuse:

CNH Part Number 87630671 (H)

M8 x 90 flange head bolt and flange nut (H1) x4



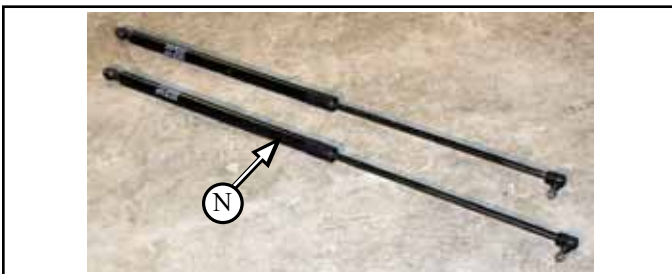
**7.7 Gas Spring Installation**

**Install Gas Spring onto Ladder Lever CS927B**

Reuse Gas Spring from disassembly

**Parts List:**

#47360439 Factory ladder gas spring (strut) (N) Qty 2

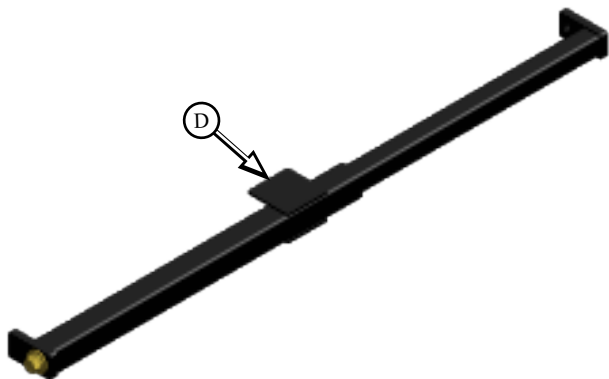


**7.7.1 Compress existing gas springs (N) to 712mm (28 in.) long**

Short Stud (B)

Longer Stud (C)

-Order CS965BA Shock Compressor Tool (D) if required



CAUTION

Gas Spring is under load and will extend when released

**7.7.2** Mount gas spring (**N**) onto the left side ladder lift arm (**E**) with:

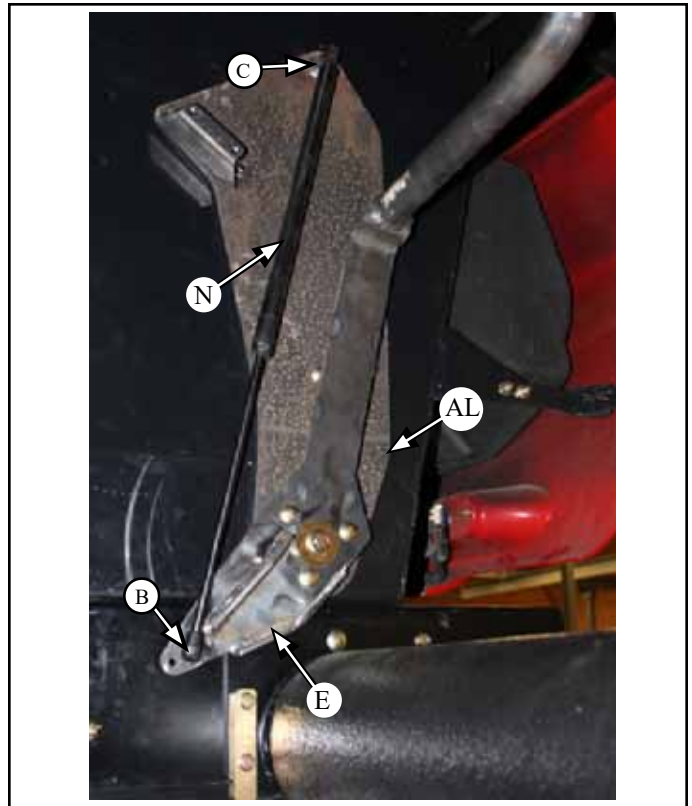
- factory hardware
- Gas shock should be mounted Rod end Down


Ensure Short Stud (**B**) is connected to ladder lift arm (**E**)  
Ensure Longer Stud (**C**) is connected to Plate Ladder Mount Left (**AL**)

**7.7.3** Mount gas spring (**N**) onto the right side ladder lift arm (**E**) with:

- factory hardware

Ensure Short Stud (**B**) is connected to ladder lift arm (**E**)  
Ensure Longer Stud (**C**) is connected to Plate Ladder Mount Left (**AR**)



 **Longer stud should be located at the top of gas shock.**  
**They may need to be switched**

## 7.8 Door Proximity Sensor Bracket Installation

### Parts List:

part located in CS1131BS box  
hardware located in CS859S bag

CS851B      Bracket Door Prox Sensor (**T**)      Qty 1

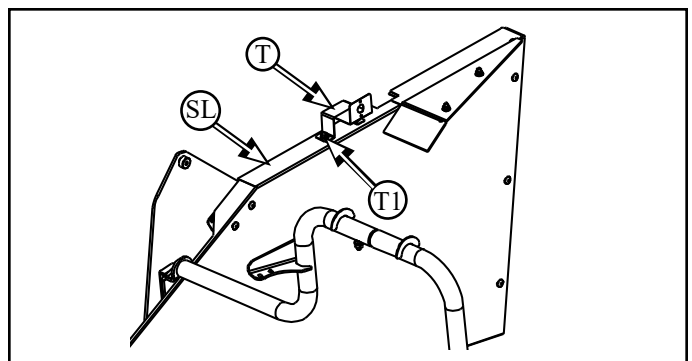
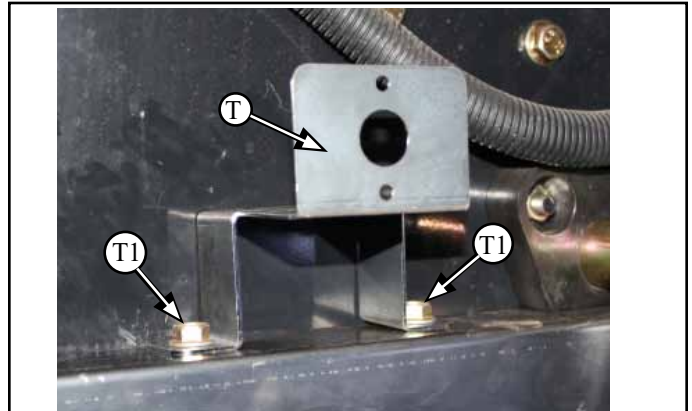
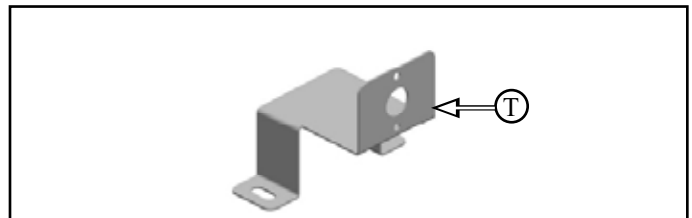
**7.8.1** Mount Bracket Door Prox Sensor (**T**) on the top left side of Frame (**SL**) with:

- M10 x 20 flange head bolt and flange nut (**T1**) x2

**7.8.2** Install Sensor

**7.8.3** Align Target and Spacing 2-4mm Clearance

**7.8.4** Connect wire extension RP953

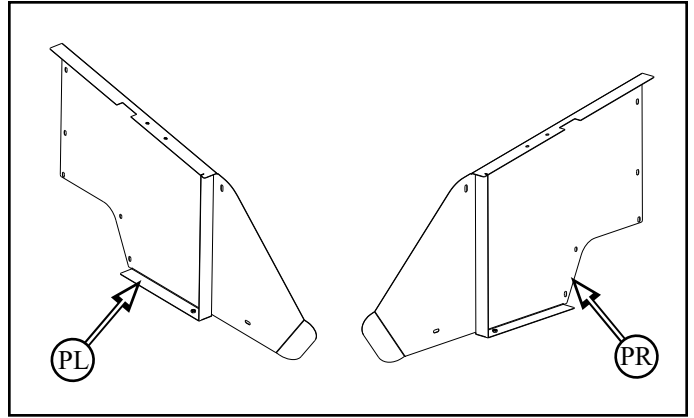


## 7.9 Ladder Wall Panel Installation

### Parts List:

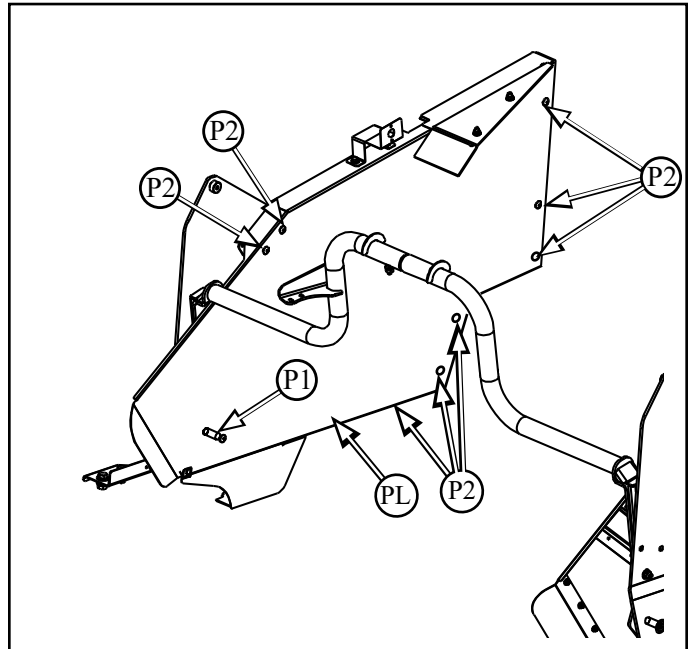
Parts located on pallet  
hardware located in CS859S bag

CH649BL Case IH Ladder Side Wall Left **(PL)** Qty 1  
CH649BR Case IH Ladder Side Wall Right **(PR)** Qty 1



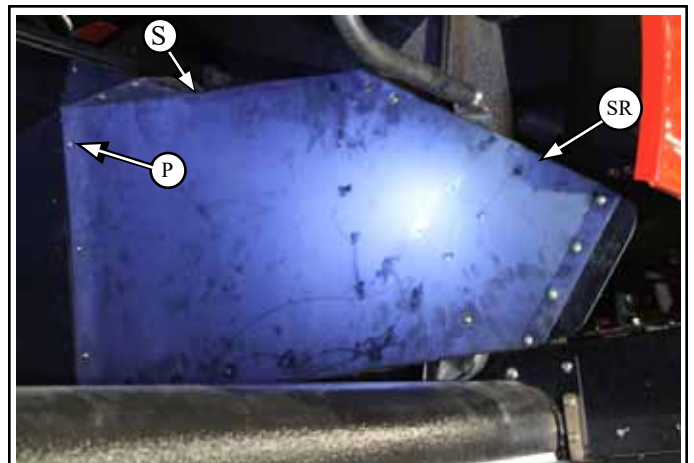
**7.9.1** Mount Left Ladder Side Wall Panel **(PL)** on to left side with:

- M8 x 16 round button head Allen socket bolt **(P1)**
- M8 x 20 flange bolt **(P2)** x7
- Silicone gap **(S)** between top flange of **(PL)** and side wall of combine



**7.9.2** Repeat procedure for Right Wall Side Panel **(PR)** on right side

**7.9.2** Right ladder side wall panel installed **(SR)**



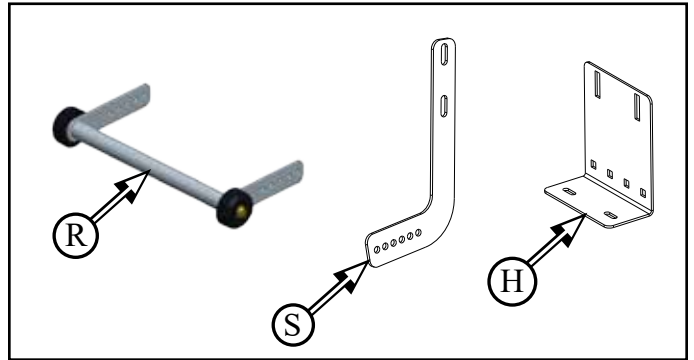
## 7.10 Handle Ladder AFX Assembly Installation

### Parts List:

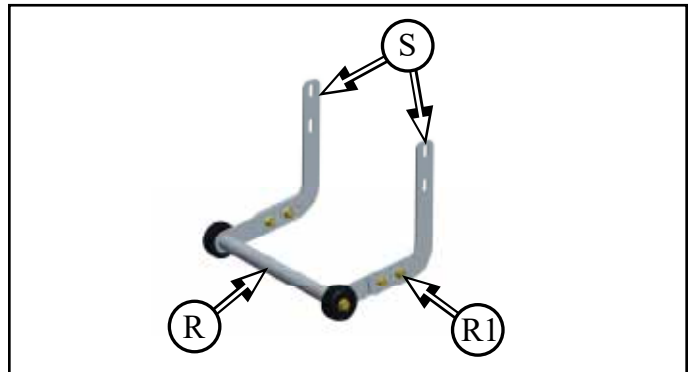
parts located in CS1131BS box  
hardware located in CS859S bag

CS950BA	Handle Ladder AFX Assy (R)	Qty 1
CS949B	Handle Ladder Plate (S)	Qty 2
CS1084B	Ladder Handle Bracket (H)	Qty 2

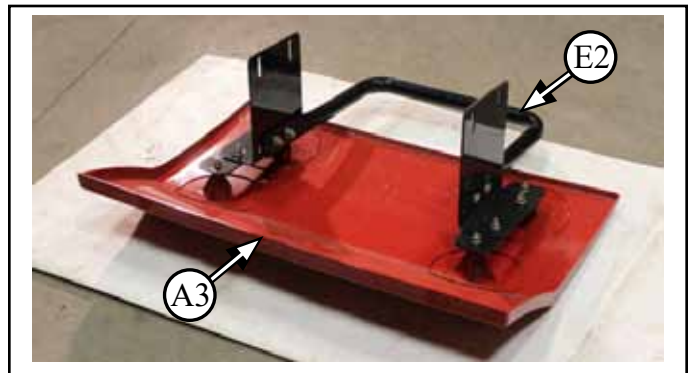
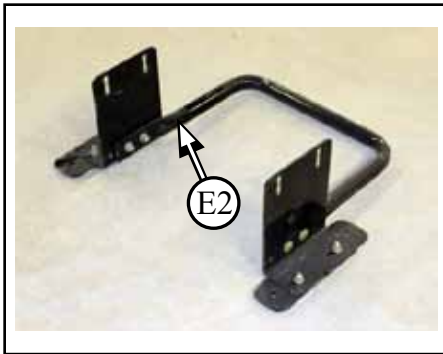
**\*\* ensure wheels spin freely \*\***



**7.10.1** Assemble ladder handle (R) and plates (S) together with:  
- M10 x 25 flange bolt and flange nut (R1) x4

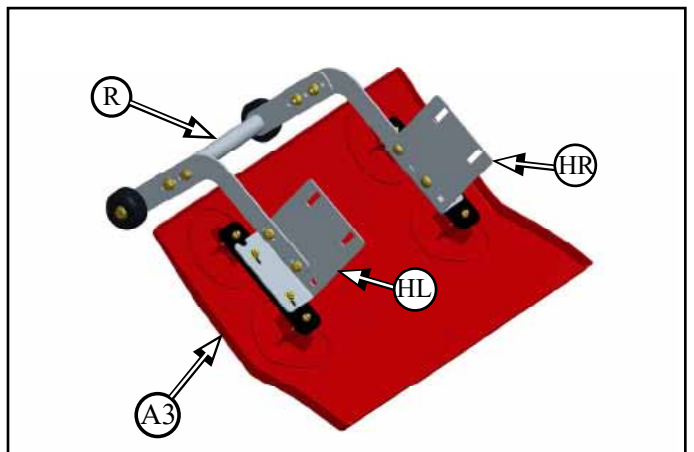


**7.10.2** Find the glamour panel (A3) (Section 3.1.4 from Removal Guide)  
- Remove the ladder handle and brackets (E2) from glamour panel (A3)  
- (E2) not to be reused.



**7.10.3** Assemble new ladder handle assembly (R) and ladder handle brackets (H) onto glamour panel (A3) with existing hardware.

**\*\* Glamour panel and handle need to be adjusted so that the ladder catches on the top step and the Glamour panel clears the tail boards when in the down position \*\***



**7.10.3.1** See Pictures for reference Bolt and Hole locations for the Ladder Handle and Glamour Panel Assembly.

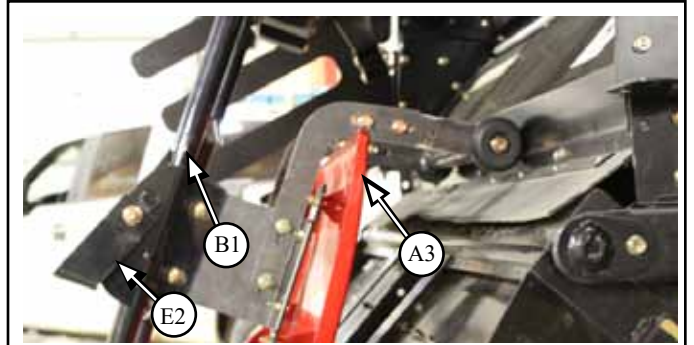




**7.10.4** Mount glamour panel (**A3**) onto factory Ladder when lower ladder is folded up (**E2**) with:  
- M10 x 25 flange bolt and flange nut (**B1**) x4




**7.10.4.1** Adjust (**B1**) bolts in slots to align the Glamour Panel with combine rear Cowling when ladder is up.



**7.10.5** Assembled ladder kit over view after Chopper has been mounted.



 Chopper tailboard must be fully lowered to allow clearance between the Glamour Panel and the top of the tailboard.



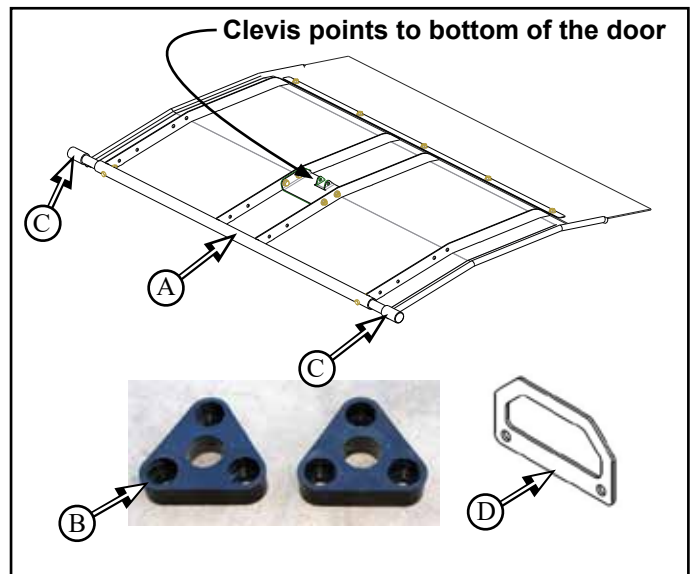
## 8 Straw Door Installation

### 8.1 Straw Door Assembly Installation

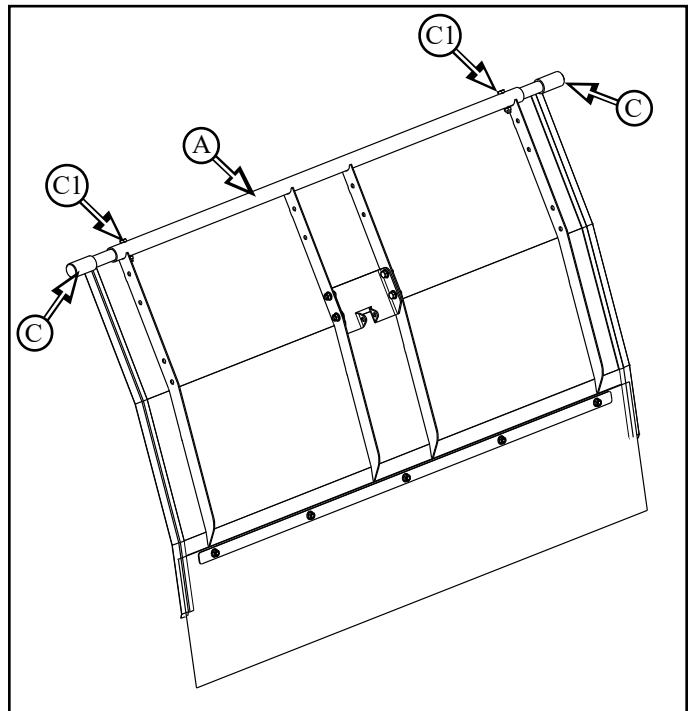
parts located on pallet  
hardware located in CS859S bag

#### Parts List:

CS1082BA	Straw Door Assembly <b>(A)</b>	Qty 1
87105202	Pivot Tube Blocks <b>(B)</b>	Qty 2
	(reused from Internal Straw Door)	
CS937Z	Pin AFX Straw Door <b>(C)</b>	Qty 2
87547587	Locknut Hex M10 x 1.5 <b>(C1)</b>	Qty 6
	(reused from Internal Straw Door)	
CS878B	Straw Door Handle <b>(D)</b>	Qty 1
	(not required if straw door has actuator)	

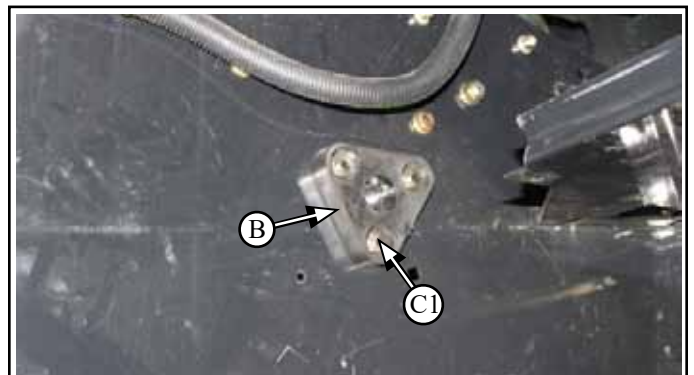


**8.1.1** Remove the hardware **(C1)** securing the pins **(C)** in the ends of the straw door **(A)**



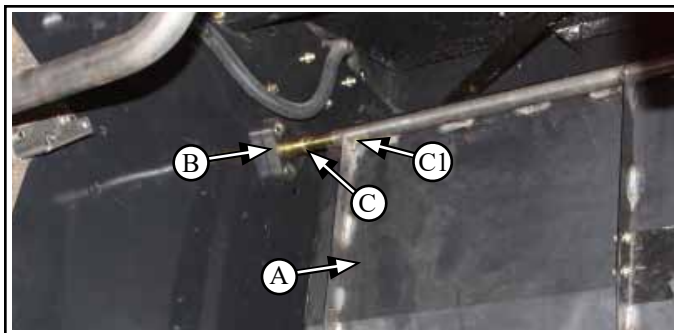
**8.1.2** Reinstall pivot tube block **(B)** onto studs in side wall of combine with:

- M10 flange nuts **(C1)** x3
- both sides



**8.1.3** Slide the straw door (A) up into the combine to the pivot tube blocks (B)

**8.1.3.1** Slide the pins (C) into the pivot tube block (B) and secure pins (C) with hardware removed in 8.1.1:  
- M8 x 45 hex head bolt and hex nut (C1) both sides

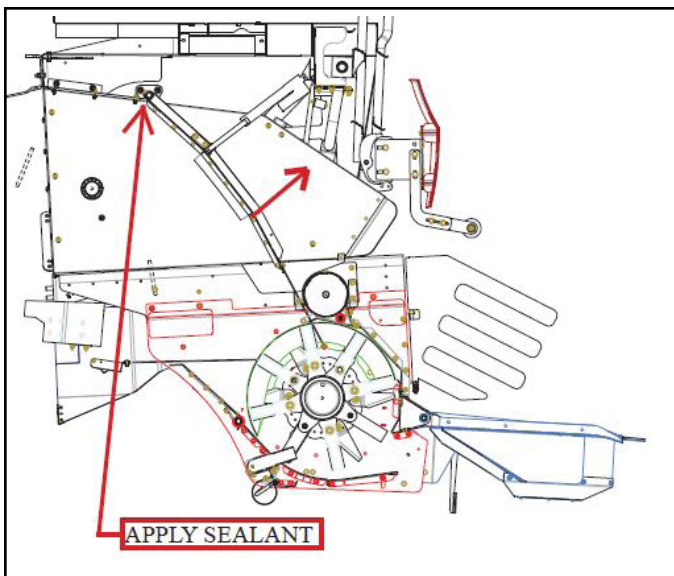


**8.1.4.3** Straw door (A) installed



**8.1.5** Case AFX Straw Door Sealing

- Raise straw door to rear most position and apply a bead of RTV Silicone between the straw door pipe and roof.
- Apply Silicone to any other openings



## 8.2 Straw Door Adjustment

If combine is equipped with electric actuator - Install new straw door actuator - RP940 - Step 8.2.2

### 8.2.1 for Mechanical Linkage Arm:

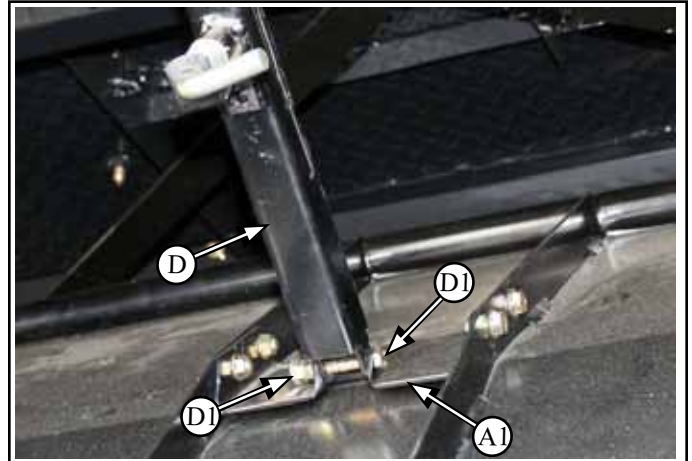
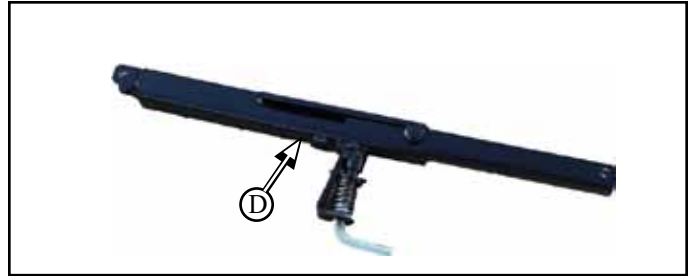
#### Parts List:

purchase part kit #CS861K if required, consists of:

CS861BA	Straw Door Linkage Arm (D)	Qty 1
84127250	Rear Mount Bracket	Qty 1
CS878B	Door Handle	Qty 1

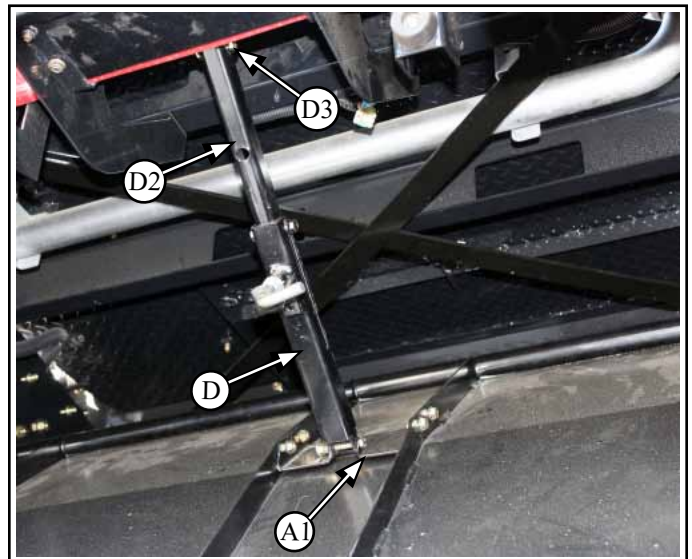
#### 8.2.1.1 Mount base of linkage arm (D) to mount plate (A1) on straw door (A) with:

- M8 x 40 hex head bolt x1 and flange nut x2 (D1)



#### 8.2.1.2 Mount top of linkage arm (D2) to top bracket with:

- M8 x 40 hex head bolt and flange nut (D3)



### 8.2.2 for Electric Actuator:

#### Parts List:

parts located in CS1131BS box  
hardware located in CS859S bag

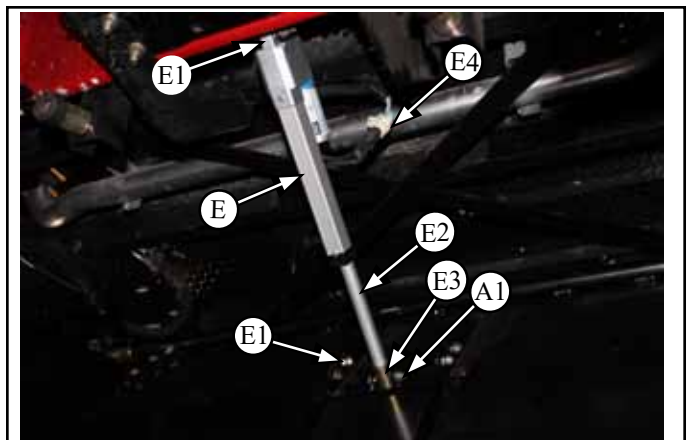
RP1058	Electric Actuator (E)	Qty 1
CS960Z	Actuator Stop (E3)	Qty 1

#### 8.2.2.1 Mount base of actuator (E) to top bracket with:

- M8 x 50 hex head bolt, flat washer and lock nut (E1)

#### 8.2.2.2 Mount arm of actuator (E2) to mount plate (A1) on straw door with:

- CS960Z Actuator Stop (E3), M8 x 50 hex head bolt, flat washer and lock nut (E1)



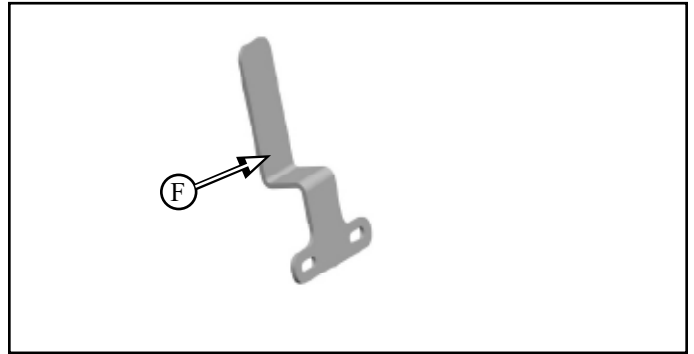
#### 8.2.2.3 Connect wire harness (E4)

### 8.3 Straw Door Sensor Target Installation

#### Parts List:

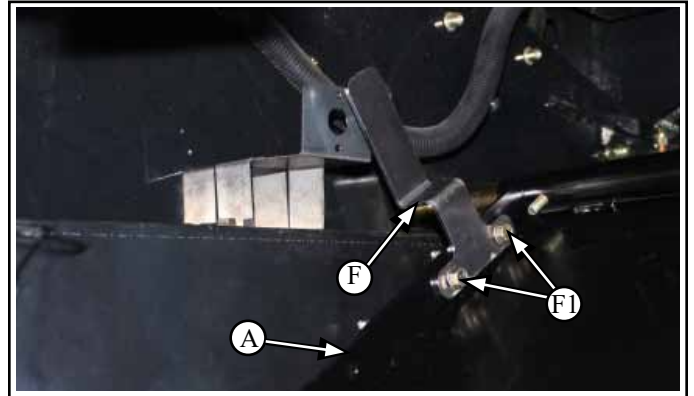
parts located in CS1131BS box  
hardware located in CS859S bag

CS943B Proximity Sensor Target Plate (F) Qty 1



**8.3.1** Install proximity sensor target plate (F) onto rib of straw door (A) with:

- M8 x 25 flange head bolt and flange nut (F1) x2



### 8.4 Top Filler Plates Installation

#### Parts List:

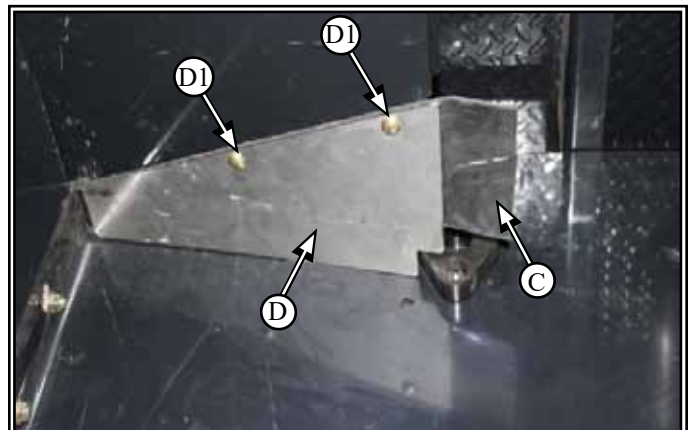
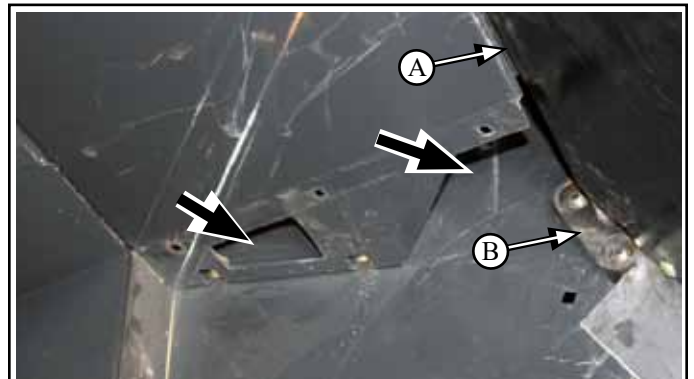
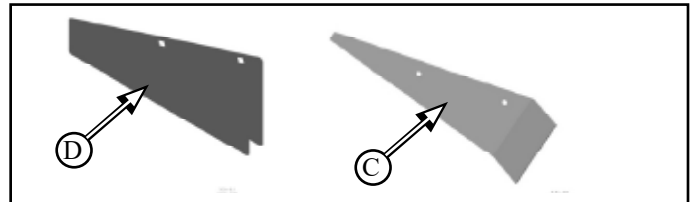
parts located in CS1131BS box  
hardware located in CS859S bag

CS468B Top Filler Plate (D) Qty 2

CS669-01 Belt Roof Seal (C) Qty 2

**8.4.1** Place the roof belt seal (C) first and then the top filler plate (D) to cover the open areas on the left and right side of combine top panel:

- M8 x 20 round head bolts and flange nut (D1) x4



# 9 Chopper Installation

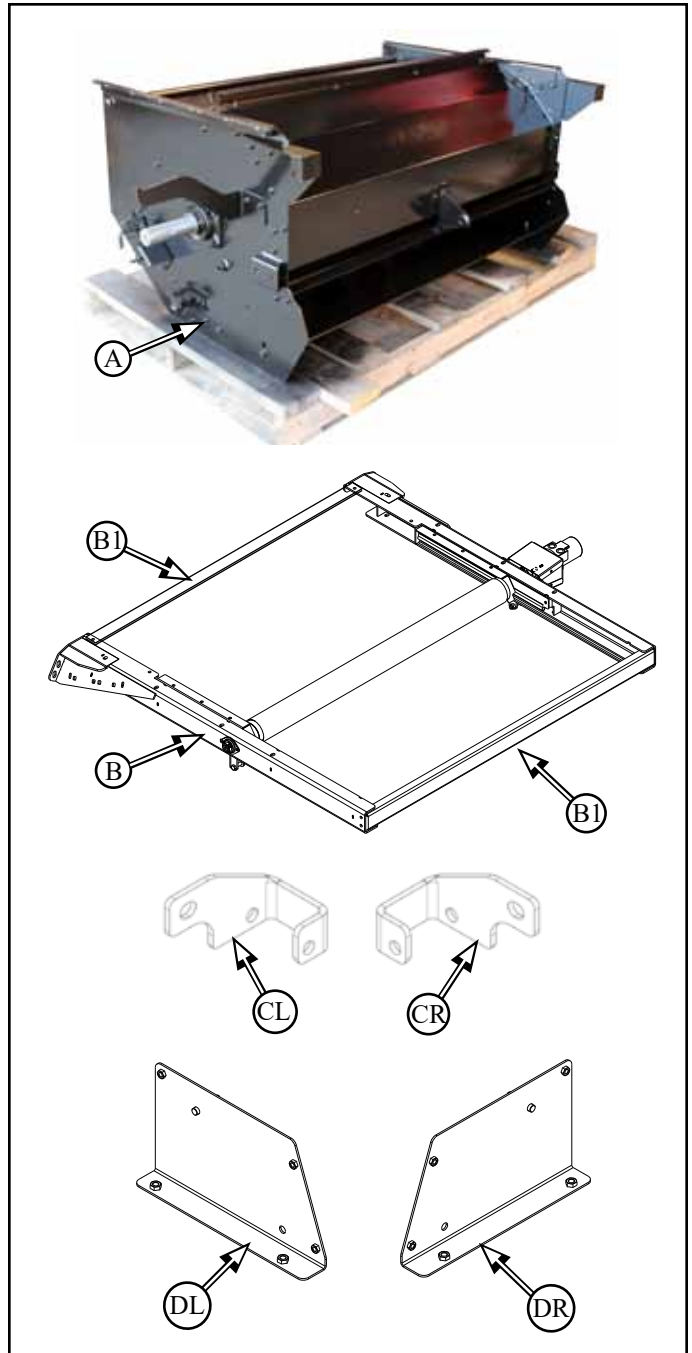
If SCU is being installed, reference SCU Installation Manual for chopper modifications prior to installation

## 9.1 Interface Installation onto Chopper

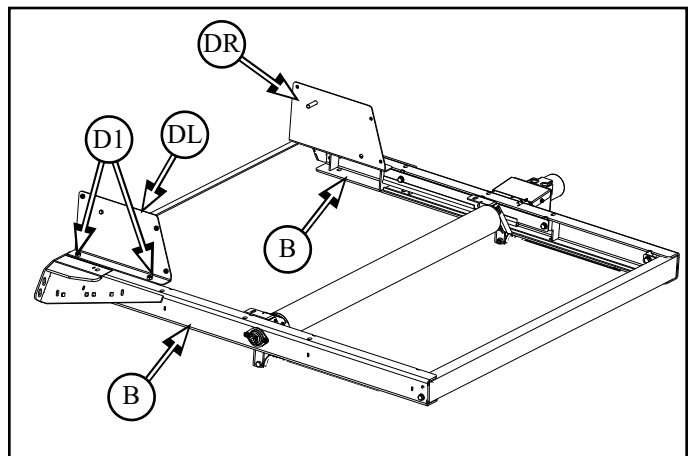
### Parts List:

parts located on pallet and in CS1130BS box  
hardware located in CS625S bag

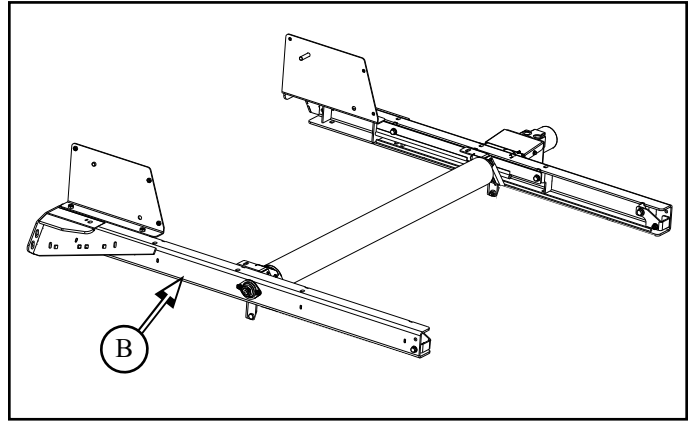
CH611BA	AFX MAV Chopper SCU ready (A)	Qty 1
CS1076BA	AFX Chopper Roller Rails Interface (B)	Qty 1
CS1110BL	Chopper Slide Stop Lt (CL)	Qty 1
CS1110BR	Chopper Slide Stop Rt (CR)	Qty 1
CH708BL	Front Skin Support Brkt Lt (DL)	Qty 1
CH708BL	Front Skin Support Brkt Rt (DR)	Qty 1



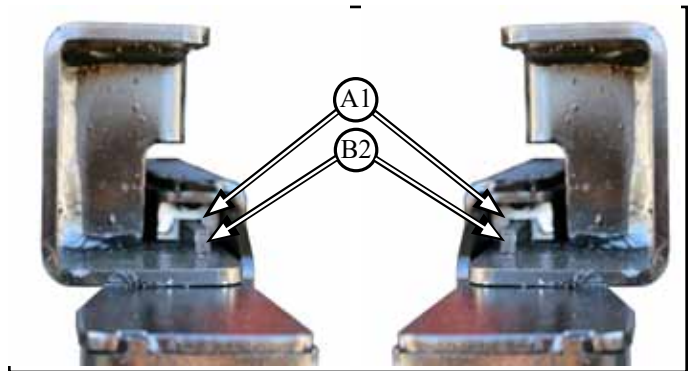
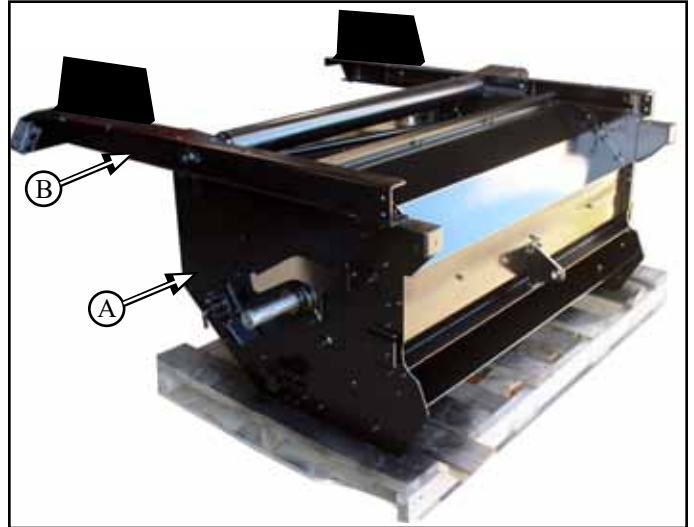
**9.1.1** Install front skin support - left (DL) to left front of chopper rails (B) with:  
 - M10 x 20 flange bolt (D1) x2  
 - repeat for right side



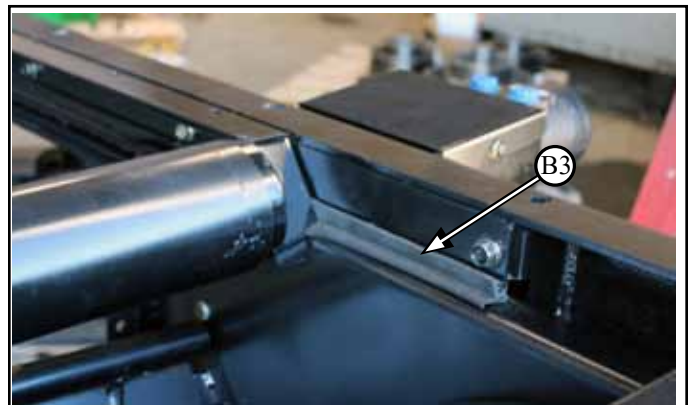
9.1.2 Remove braces (B1) x2 from interface (B)



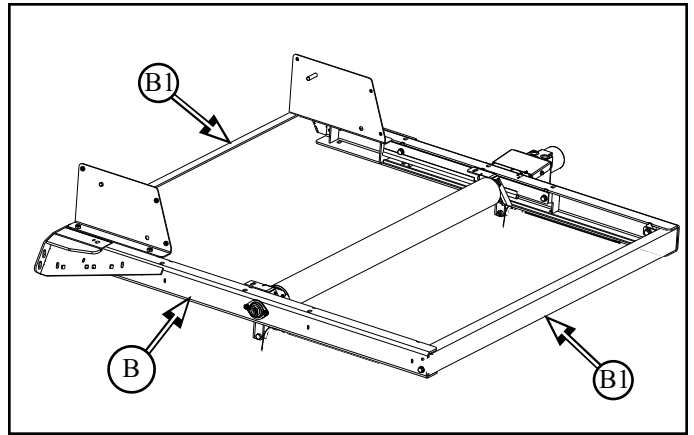
9.1.3 Slide interface (B) onto chopper (A) from front end of chopper  
- ensure alignment bar (B2) on bottom edge of interface slides into channel of poly slider (A1) on upper edge of chopper - both sides



- careful not to tear bulb seal (B3)

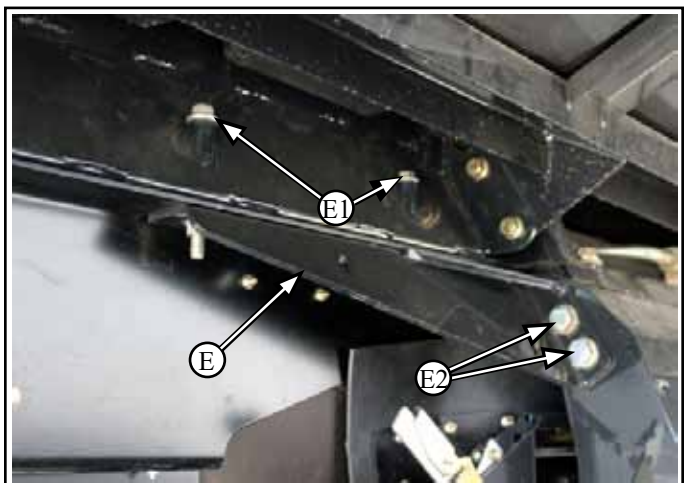
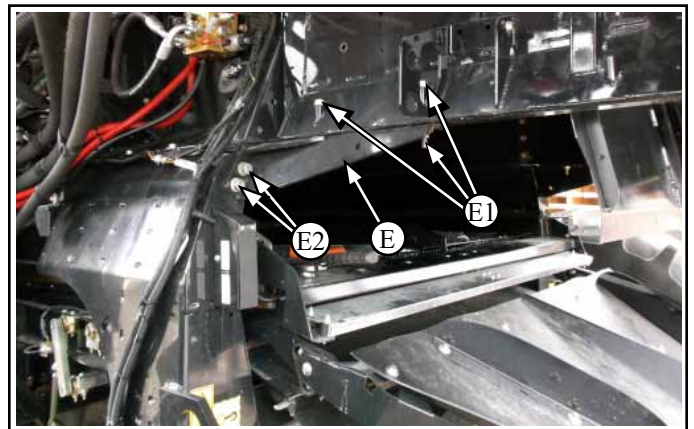


**9.1.4** Reinstall rear braces (**B1**) x2 onto installed interface (**B**) to keep frame square when installing onto combine  
- reuse hardware



## 9.2 Remove Left and Right Rear Gusset Support Braces (E)

**9.2.1** Remove hardware (**E1 & E2**) x2 mounting left and right rear gusset support braces (**E**)  
- not to be reused  
- hardware to be reinstalled





### 9.3 Install Redekop Chopper



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



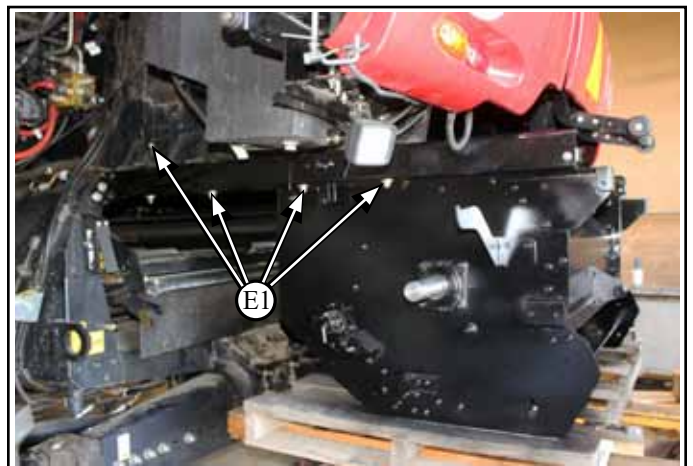
9.3.1.1 Fasten interface rails to bottom of combine flange with:

- reuse existing hardware
- M12 x 200 hex head bolt, flat washer, heavy duty flat washer, lock washer, flange nut (E1) x8 - both sides
- on right side, the 3 front bolts will have to be installed pointing up, with the head on the bottom



**E1:**  
M12 x 200 hex head bolt  
Flat washer

Heavy duty washer  
Lock washer  
Flange nut

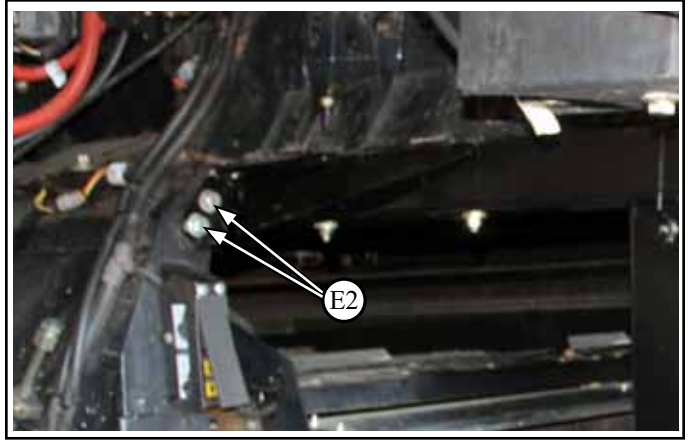


**Note:** Some bolts will have to be installed from the bottom because of tanks on some models

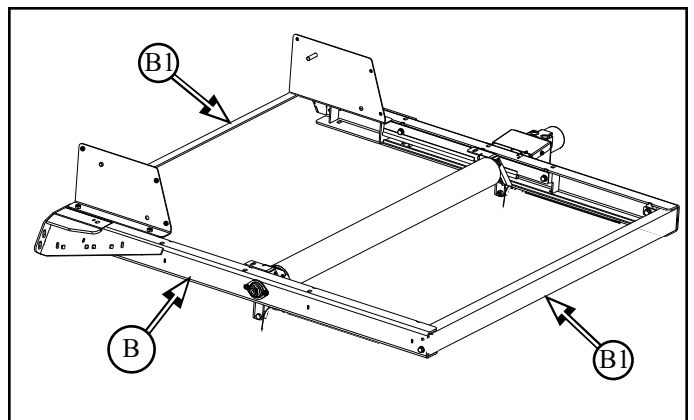
**9.3.1.2** Fasten front of interface rails to rear of combine with:

- reuse existing hardware
- M16 x 40 hex head bolt, flat washer (**E2**) x4 - both sides

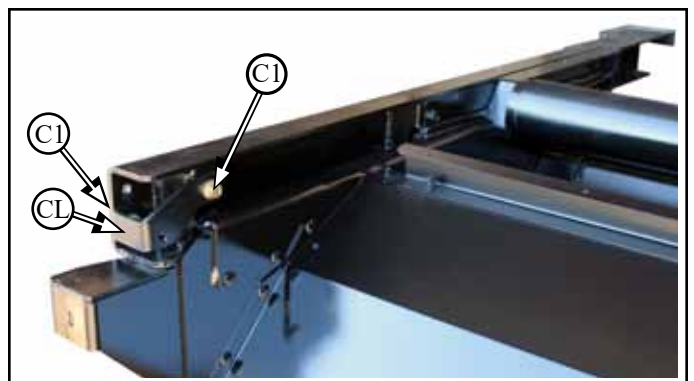
**9.3.2** Ensure chopper is square to combine  
- tighten mounting hardware (**E1** & **E2**)



**9.3.3** Remove braces (**B1**) x2 from interface (**B**)



**9.3.4** Install chopper slide stop (**CL**) onto rear of interface channel, both sides, with  
- M8 x 25 flange bolt and flange nut (**C1**) x4

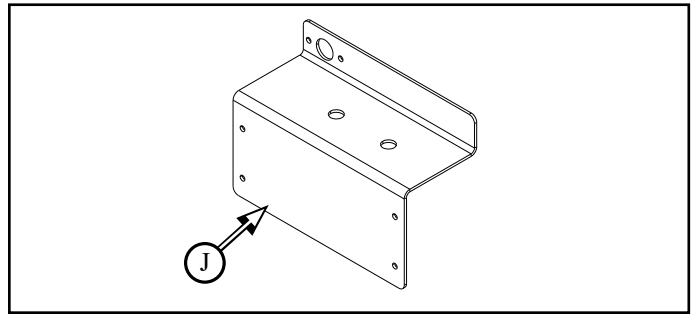


## 9.4 Ladder Proximity Sensor Mount Plate Installation

### Parts List:

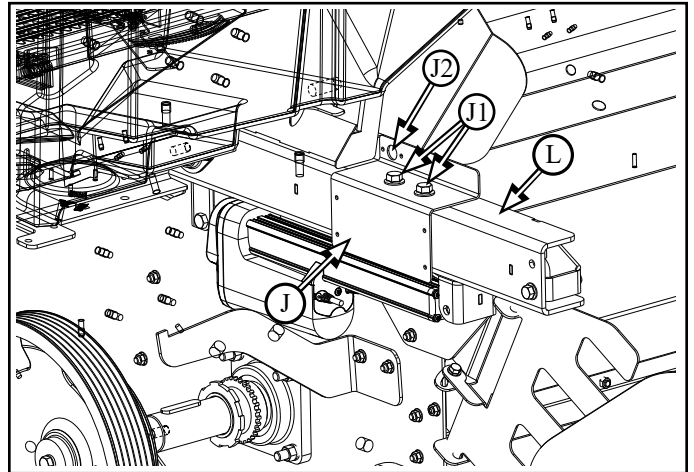
parts located in CS1131BS box  
hardware located in CS859S bag

CS1154B Ladder Proximity Sensor Mount Plate (**J**) Qty 1



**9.4.1** Install proximity sensor mount plate (**J**) on to interface (**L**) with:


- M12 x 25 flange bolt and flange nut (**J1**) x2



**9.4.2** Install Sensor into hole (**J2**) on sensor mount plate (**J**)

- adjust sensor to have 2-4mm clearance
- connect wire harness

## 9.5 Rotor Blade Clearance Inspection

**9.5.1**  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

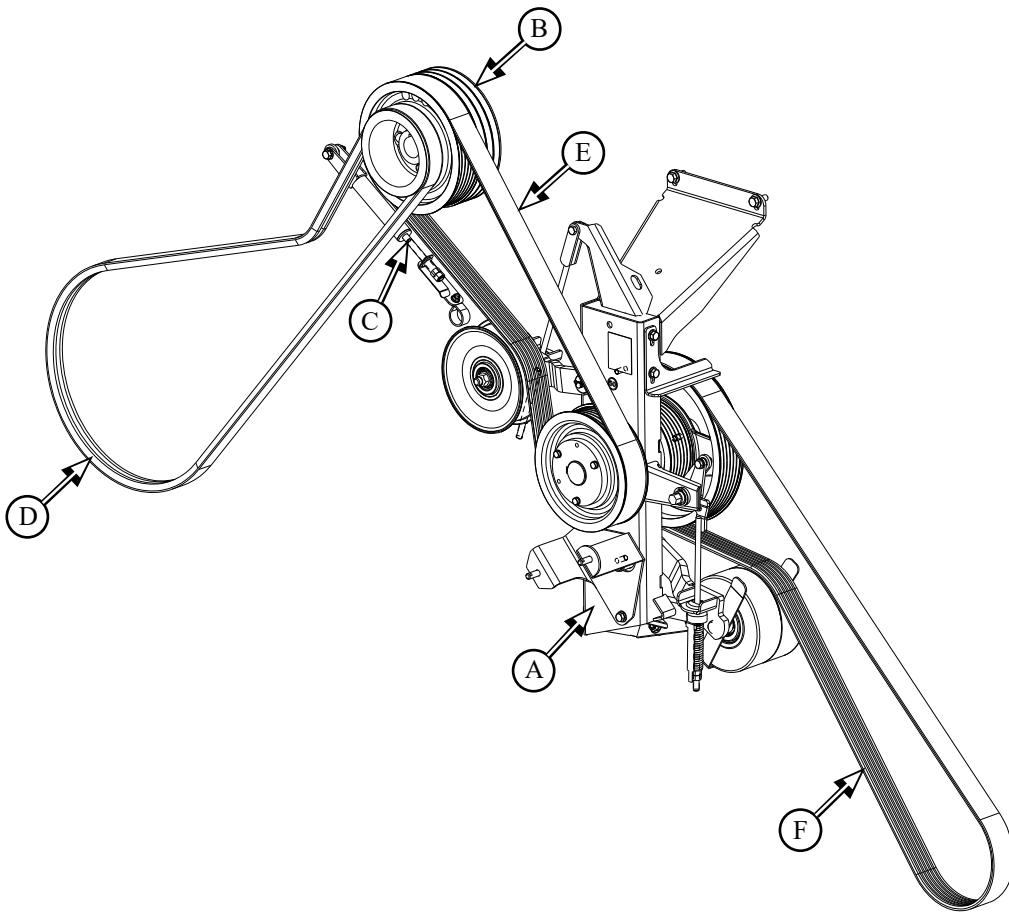
Not doing so could cause catastrophic failure

# 10 Chopper Drive Jackshaft Installation - MY22

## Parts List:

parts located on pallet, CS1132BS box  
hardware located in CS825S bag

CH660BA Jackshaft AFX 6M Assy (A)	Qty 1	RP1135 Sheave AFX PTO 6M (B)	Qty 1
CS784BA Spring Assy Weld Int Chopper HS (C)	Qty 1	BE2B117K VBelt 2B 117L (D)	Qty 1
BE6M92K VBelt 6M 92L Kevlar (E)	Qty 1	BE6M121K VBelt 6M 121L Kevlar (F)	Qty 1
CS837Z Bracket Notched 240S KBar Adj 25% (H)	Qty 1	CS838Z Bracket Notched Knife Bar Adj 25% (I)	Qty 1

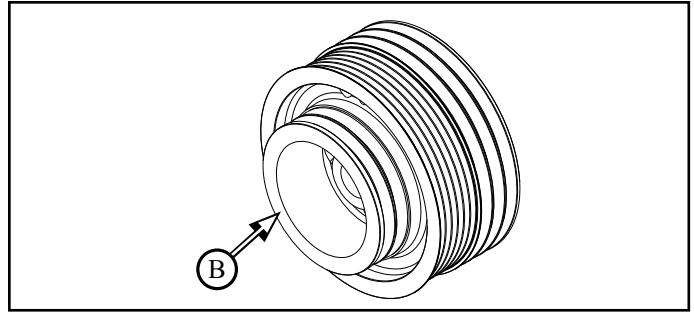


## 10.1 Sheave AFX PTO 6M Installation

### Parts List:

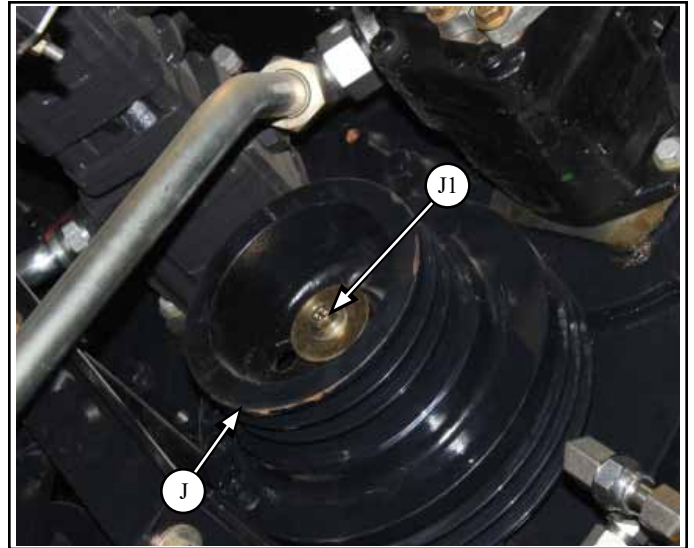
parts located in RP1135S box

RP1135 Sheave AFX PTO M Driver (**B**) Qty 1



### 10.1.1 Remove the factory sheave (**J**)

- not to be reused
- keep all hardware (**J1**)

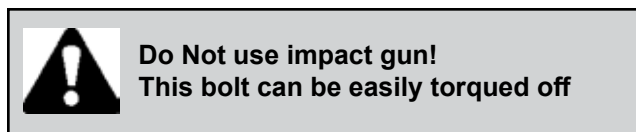


### 10.1.2 Install new 6M Sheave (**B**) with:

- existing hardware (**J1**)
- ensure key is in place

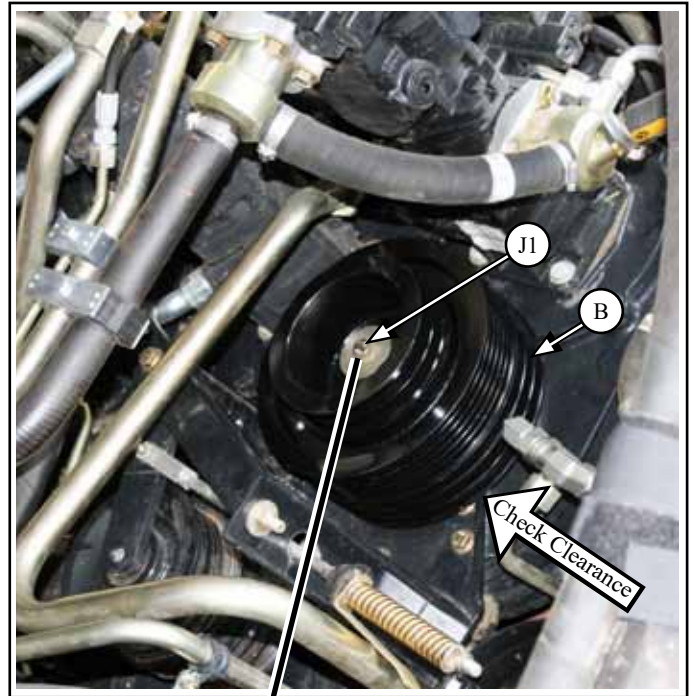
#### 10.1.2.1 Torque bolt (**J1**) to 95-105 N·m (70-77 ft·lb)

Then firmly tap the sheave with a rubber mallet and torque again.



### 10.1.3 Check for clearance between back of sheave (**C**) and flange on rear gusset after sheave is tightened

#### 10.1.3.1 If flange is too long, grind down flange to provide clearance



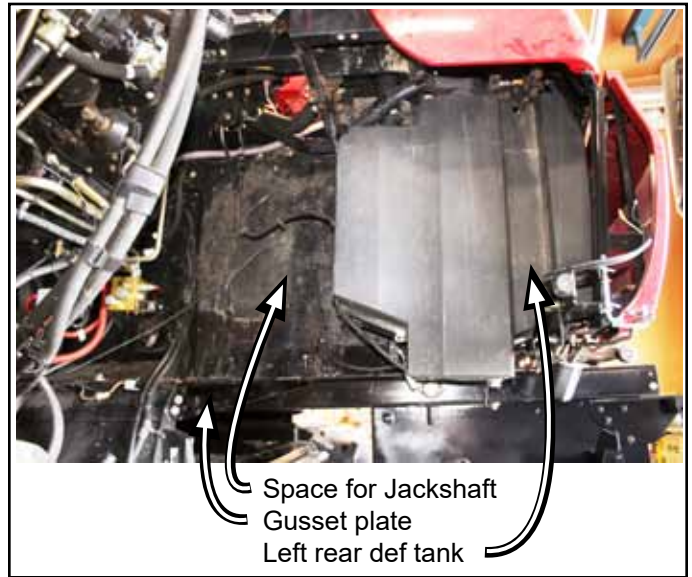
Torque to 95-105 N·m  
(70-77 ft·lbs)

## 10.2 Jackshaft AFX 6M Install

10.2.1 Lift Jackshaft (B) into place in front of left rear fuel tank



Heavy - Use Hoist or Lifting Device



10.2.2 Bottom of jackshaft to be installed onto gusset plate of interface with:

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

10.2.3 Top of jackshaft to be installed onto upper side wall with:

- M12 x 30 flange bolt and flange nut (A2) x2



Bolts (A2) to be mounted on inside of combine wall - Threads to the outside



### 10.3 Align Jackshaft Sheave

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

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

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

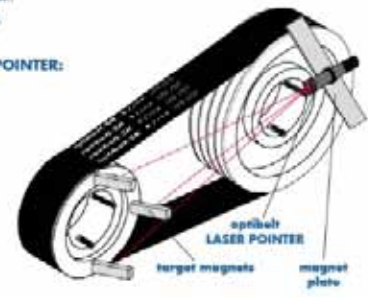


### optibelt LASER POINTER

The **optibelt LASER POINTER** makes it easier to adjust belt drives. The belt pulleys are adjusted to each other via their front or side faces, respectively.

#### BENEFITS OF THE optibelt LASER POINTER:

1. Fast and easy use for belt drives
2. laser output power 5 mW
3. Exactly aligned line projection
4. Measuring of parallel and angular misalignment
5. Higher operational reliability of the drives
6. Time saving and precise measuring method



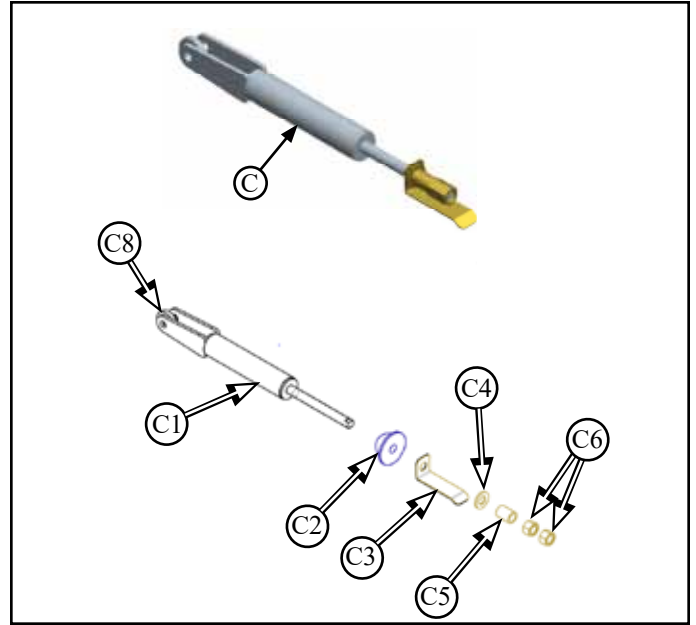
## 10.4 Spring Tensioner Assembly (C) Installation for Internal High Speed OEM Chopper Belt

### Parts List:

parts located in CS1132BS box  
hardware located in CS825S bag

CS784BA Spring Tensioner Assembly (C)	Qty 1
CS784B Spring Assy Int Chopper HS (C1)	Qty 1
CS797Z Indicator Internal Chopper HS Spring (C3)	Qty 1
CS856Z Spacer (C5)	Qty1
Washer Flat M12 x 24 x 2.5 Yzd (C4)	Qty1
Nut Hex M12 C8 Yzd (C6)	Qty2
Re-use Plastic Spacer (C2) from factory tensioner	

Tighten all belts by adjusting spring tensioners:

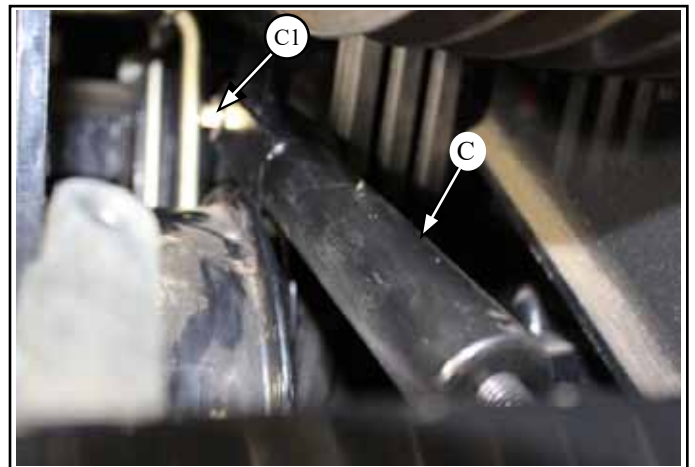
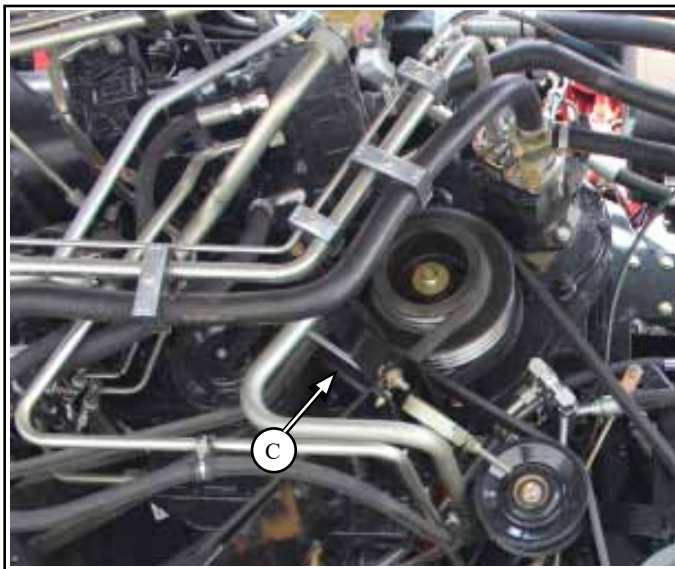
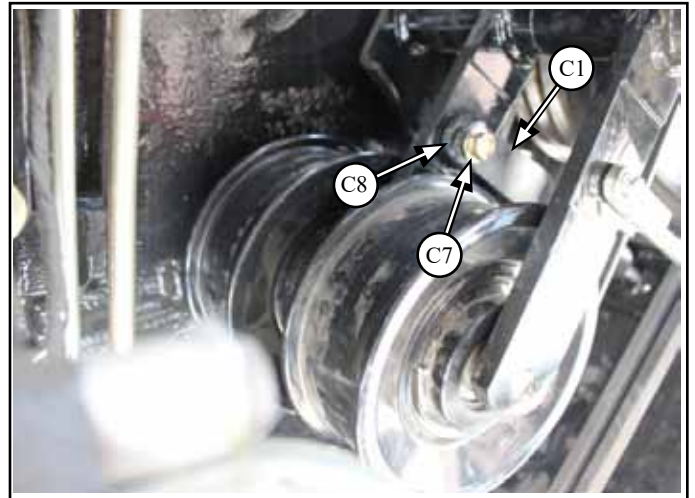


**10.4.1** Mount Spring Assy Int Chopper HS (C1) on the internal drive pulley shaft with:  
- M10 x 45 flange bolt and lock nut (C7) x1

**\*Tighten nut (C7), to touch clevis but still turn freely \***



Install spring assembly with spacer (C8) on clevis as shown (towards outside) for belt clearance





## 10.5 Re-install Drive Belts

### Parts List:

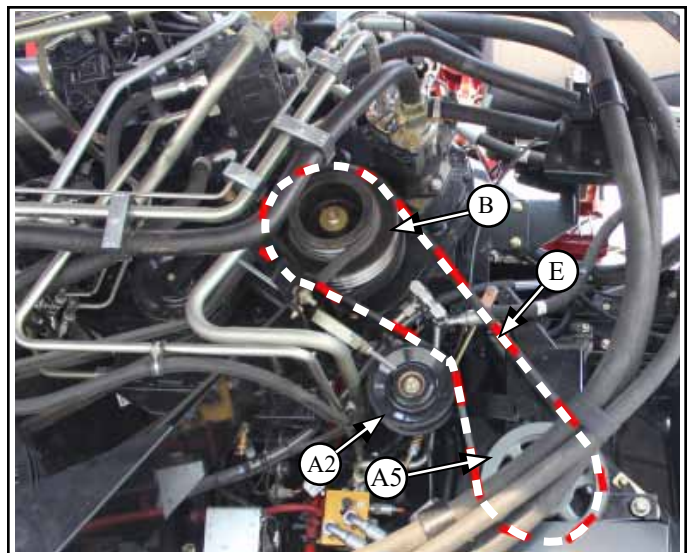
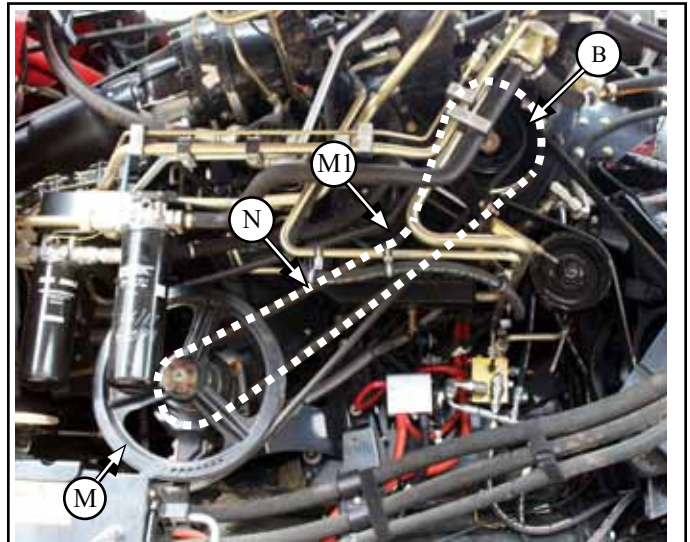
Belts located in CS1132BS box

BE2B117K	VBelt 2B x 117L (D)	Qty1
BE6M92K	VBelt 6M x 92L (E)	Qty 1
BE6M122K	VBelt 6M x 122L (F)	Qty 1

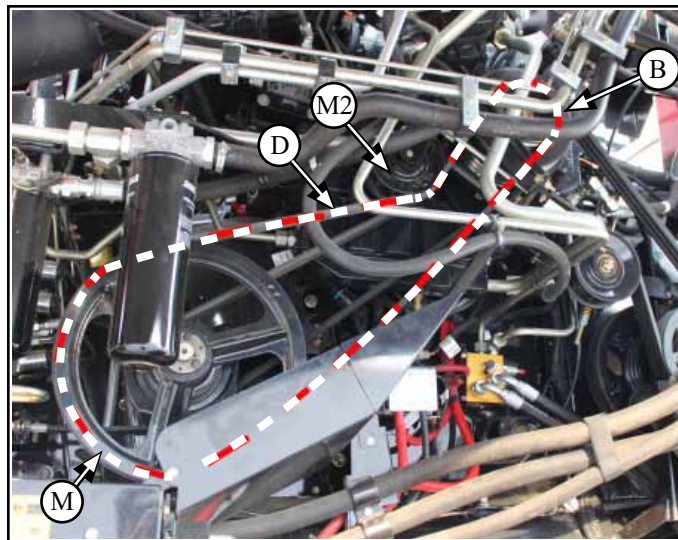


**10.5.3** Re-install OEM V belt (N) onto the upper sheave (B) inner grooves, route around idler (M1) and install onto large drive sheave (M) inner grooves on combine

**10.5.3** Install V belt BE6M92K (E) onto the upper sheave (B), route around idler (A2) and install onto the outer sheave (A5) on jackshaft



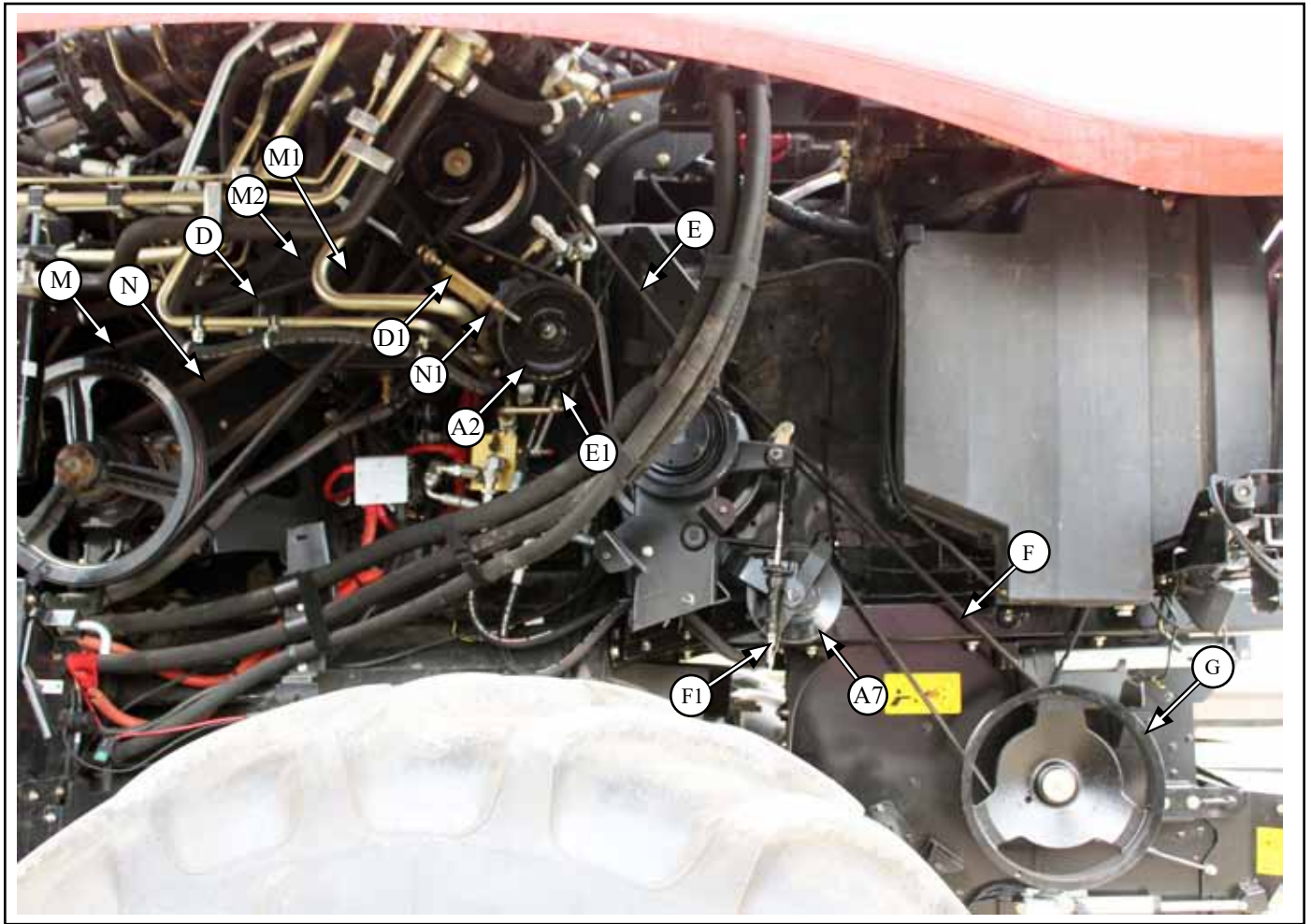
**10.5.4** Install V belt BE2B117K (**D**) onto the upper sheave (**B**) outer grooves, route around idler (**M2**) and install onto large drive sheave (**M**) on combine



**10.5.4** Install 6M belt BE6M122K (**F**) onto the inner sheave (**A6**) on jackshaft, route around idler (**A7**) and install onto the chopper drive sheave (**A8**) inner grooves

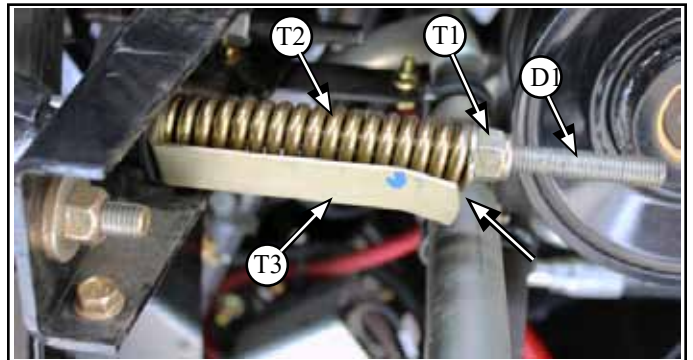


**10.5.5** Adjust tension on belts:

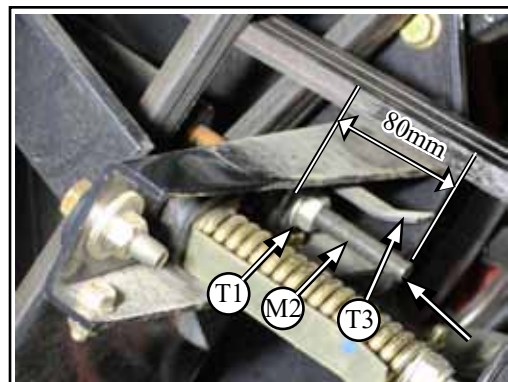


**10.5.6** To adjust the tension on the belt, the idler needs to be adjusted to apply the correct tension to the belt

**10.5.6.1** To apply idler tension (**A2, A7, M1, M2**), adjust nut (**T1**) on tension rod (**D1, F1, N1**) to tighten spring (**T2**) until it lines up with the spring indicator (**T3**)  
- typical for all belts except **M**




**10.5.6.2** To apply idler tension (**M2**), adjust nut (**T1**) on tension rod (**M2**) until indicator (**T3**) lines up with the end of the rod  
- 80mm of rod should be exposed behind pivot

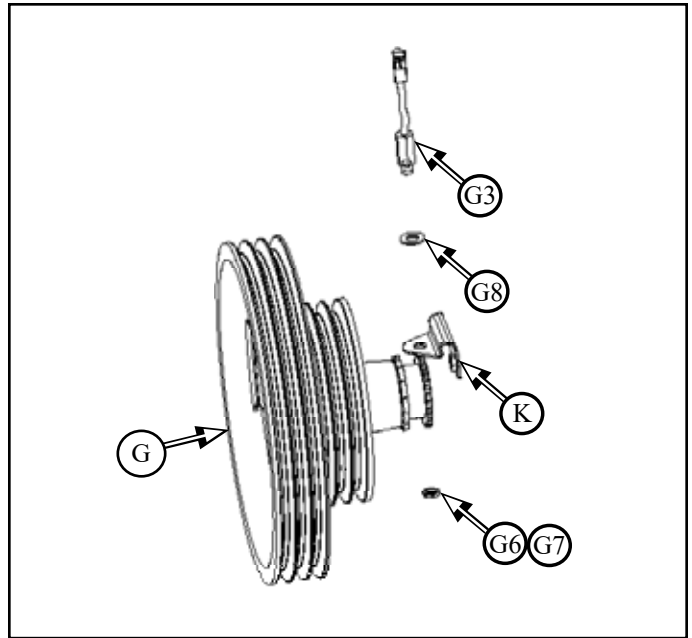


**10.6 Attach CASE IH speed sensor (G3) to the Mount Plate (K) with:**

- Hardware included in
- .5-20 hex jam nut (G6)
  - .563-32 hex jam nut (G7)
  - .563 flat washer (G8)



**bottom of sensor must be within 1-2mm of rotating tooth - adjust mount and add washer W11-09 (G8) as required**

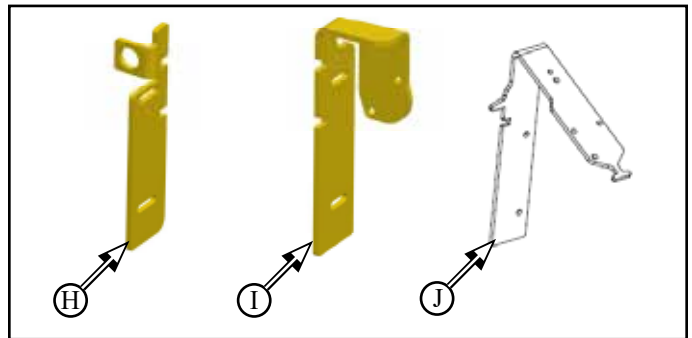



**10.7 Knifebar Engagement limiting bracket Installation - Not required if combine is equipped with hydraulic knifebar adjustment**

**Parts List:**

part located in CS1135BS box


- |         |  |
|---------|--|
| CS838Z  | Notched Bracket<br>240 Series Model Year <17,<br>230, 20, 10S KBar Adj 25% (H) Qty 1 |
| CS837Z  | Notched Bracket 240S Model Year 17<br>KBar Adj 25% (I) Qty 1                         |
| CS1064Z | Internal Knife Lock-out (J)  |





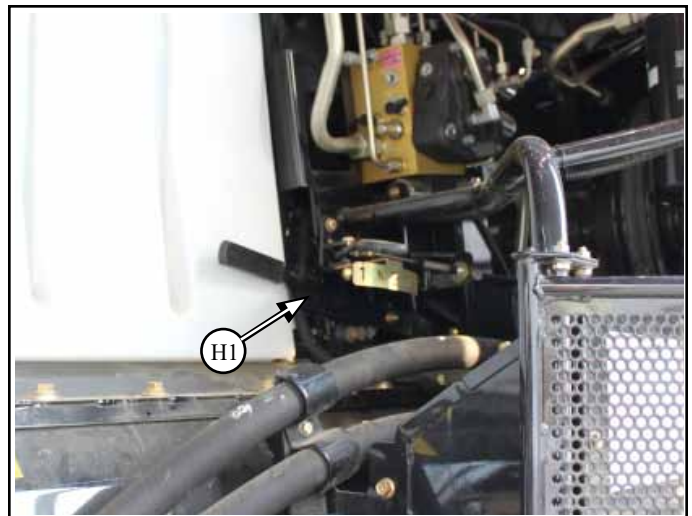
**For 230 Series Only**

**10.7.1** Remove factory bracket and replace with notched bracket (H) on the outside wall (H1) of internal hydraulic knifebar with:  
- existing hardware



**For 240 Series Only**

**10.7.2** Remove factory bracket and replace with notched bracket (I) on the outside wall (H1) of internal hydraulic knifebar with:  
- existing hardware

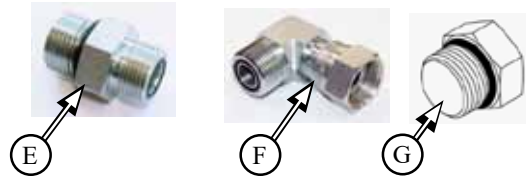


## 10.8 SCU & Windrow Hydraulics Installation

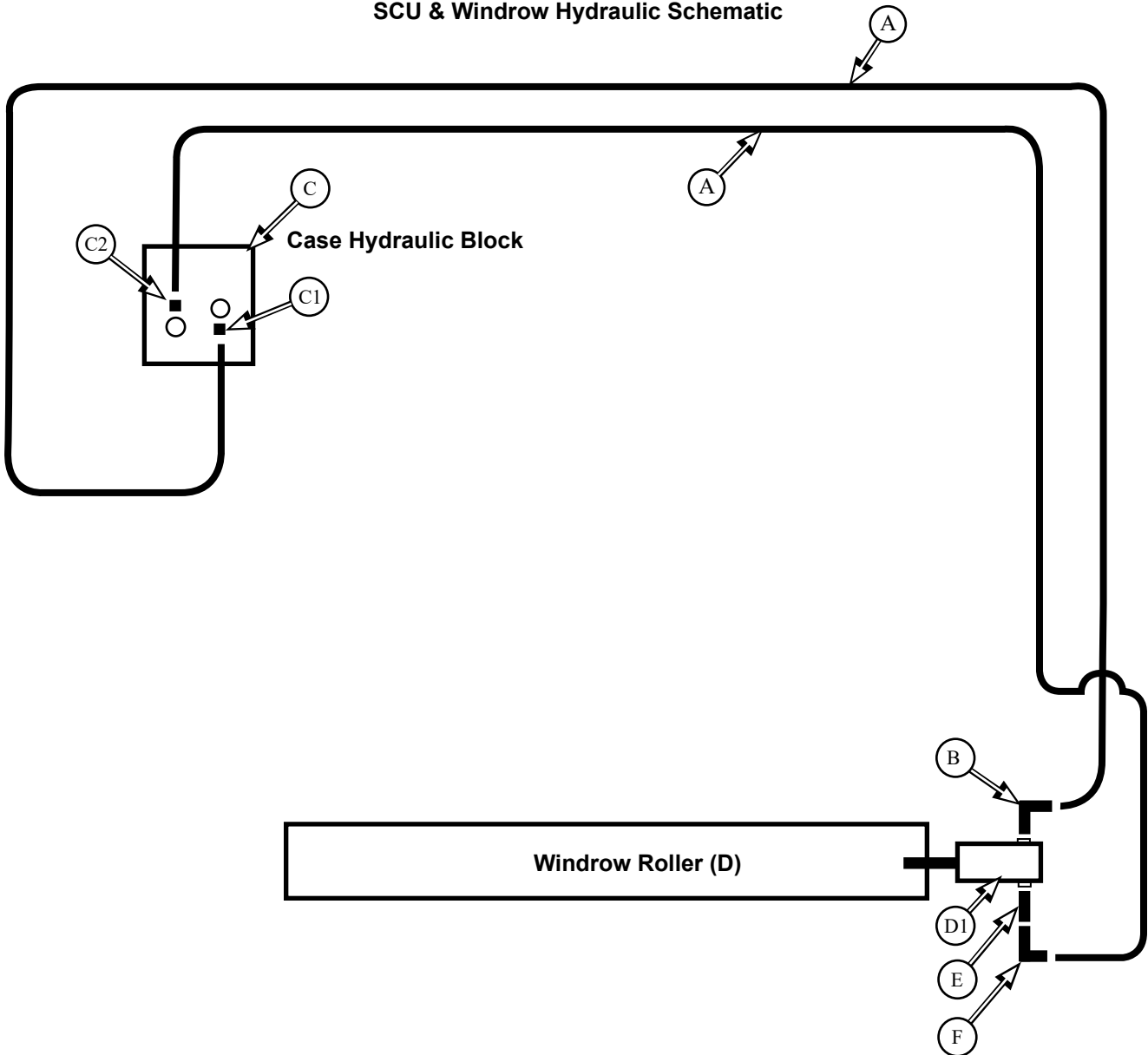
### Parts List:

parts located in CS1134BS box

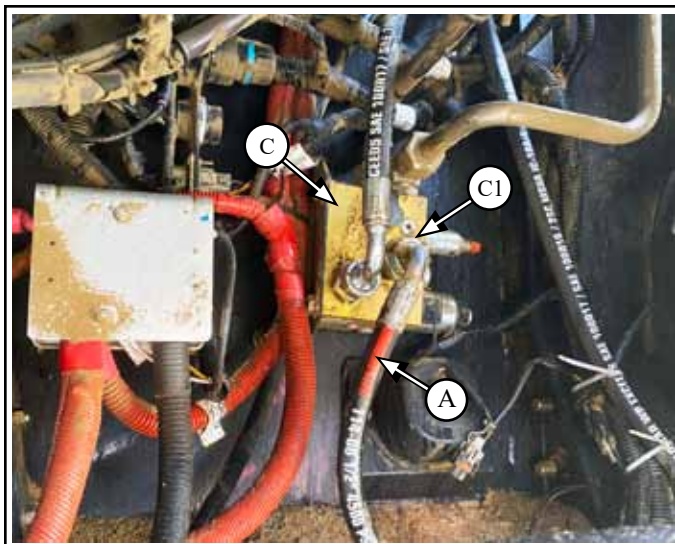
HH145	Hyd. Hose .5 x 210L (A)	Qty 2
H35-1010FS	Fit Hyd 90deg 10 MORB - 10 MORFS (B)	Qty 1
H25-1010MF	Fit Hyd Str 10 MORB - 10 MORFS (E)	Qty 1
H38-1010FFX	Fit Hyd 90deg 10 MOFS - 10 FORFX (F)	Qty 1
H17-06	Hyd Plug 6 MORFS (G)	Qty 1



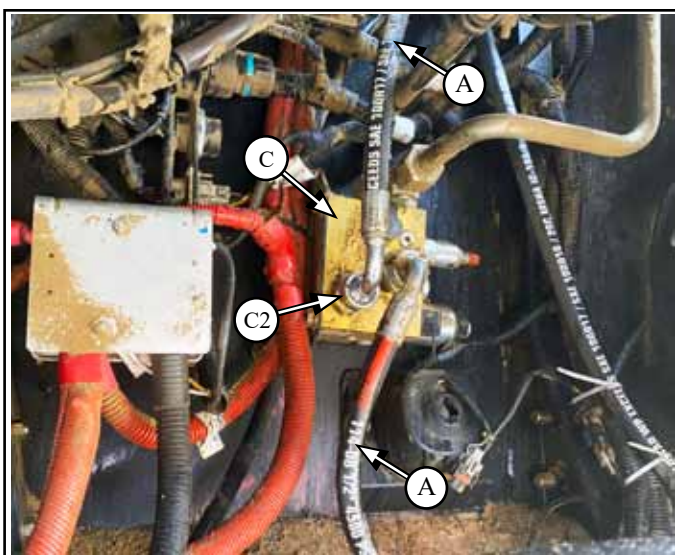
SCU & Windrow Hydraulic Schematic



**10.8.1** Install hyd hose (A) onto fitting (C1) on pressure line port of Case Hydraulic Block (C)

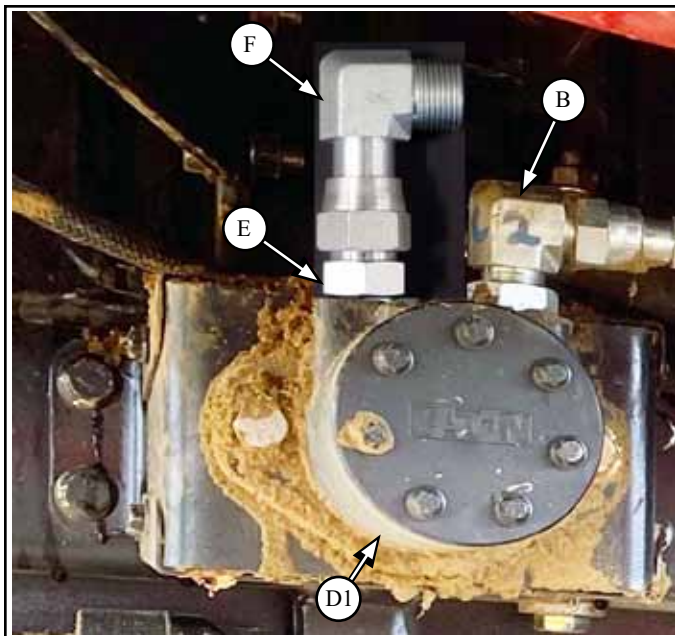


**10.8.2** Install hyd hose (A) onto fitting (C2) on return line port of Case Hydraulic Block (C)



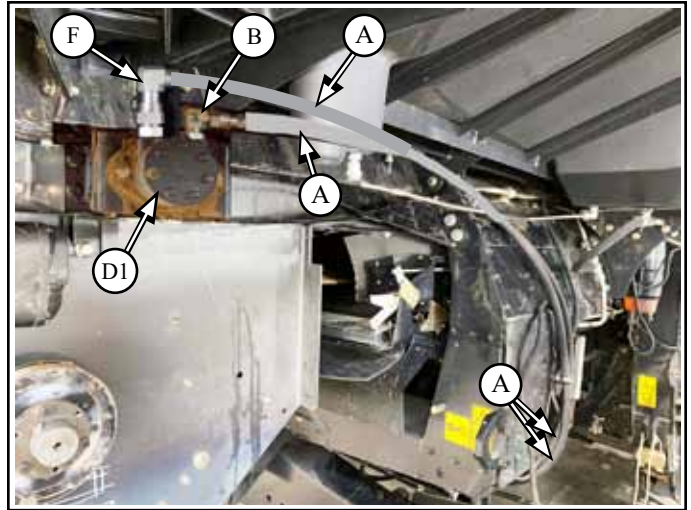
**10.8.3** Install hydraulic fitting (B) onto port of Windrow Roller motor (D1)  
- ensure fitting is facing forwards

**10.8.3.1** Install hydraulic fittings (E & F) onto other port of Windrow Roller motor (D1)  
- ensure fitting is facing forwards



**10.8.4** Run hydraulic hoses (A) underneath combine along front of rear axle to fittings (B & F) on Windrow Roller motor (D1)

**10.8.5** Install hydraulic hoses (A) to fittings (B & F) on Windrow Roller motor (D1)

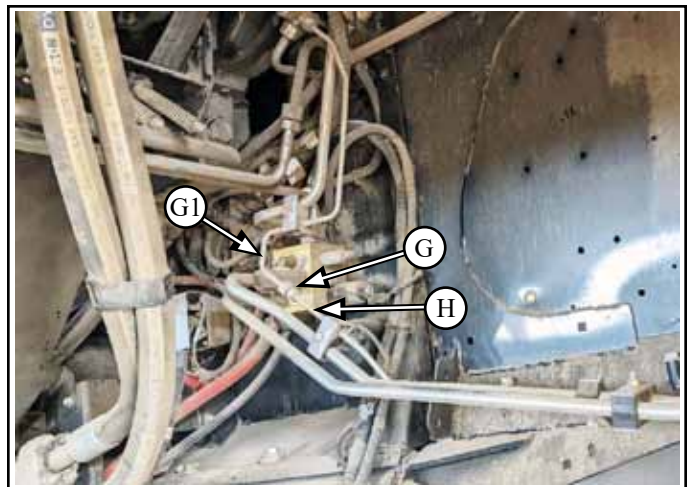


**10.8.6** Secure hydraulic hoses in place with tube clamps and cable ties

**10.8.7** Check rotation of windrow roller (D)  
- run combine  
- ensure top of roller is rotating “out” of combine  
- if rotating incorrectly, switch hoses on the motor (D1)

**EU Applications Only:**

**10.8.8** Install Hyd Plug (G) into case drain line (G1) upon removal of case drain (H)



# 11 Actuated Tailboard Control

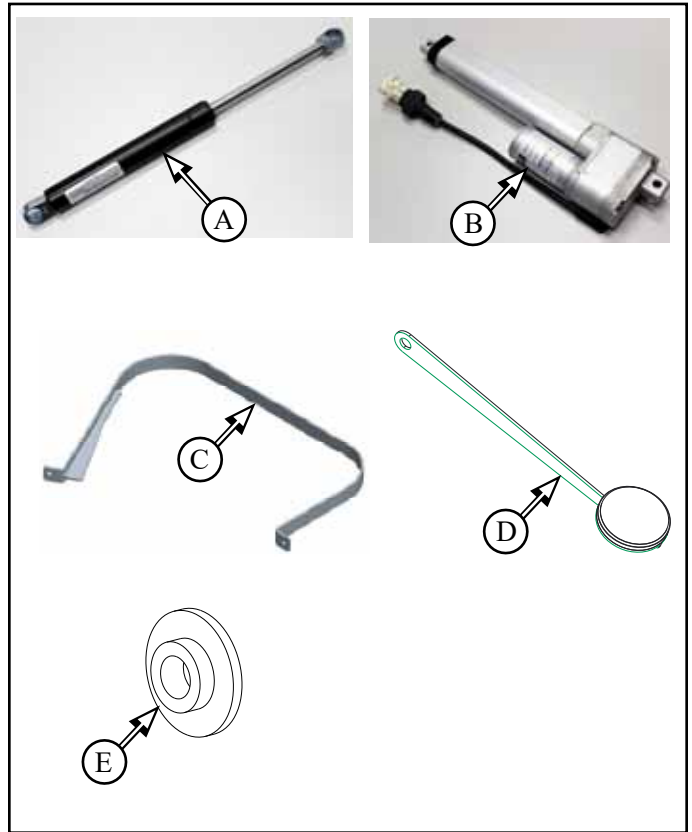
- using OEM harnesses and controls

## 11.1 Gas Shock & Actuator Installaion

### Parts List:

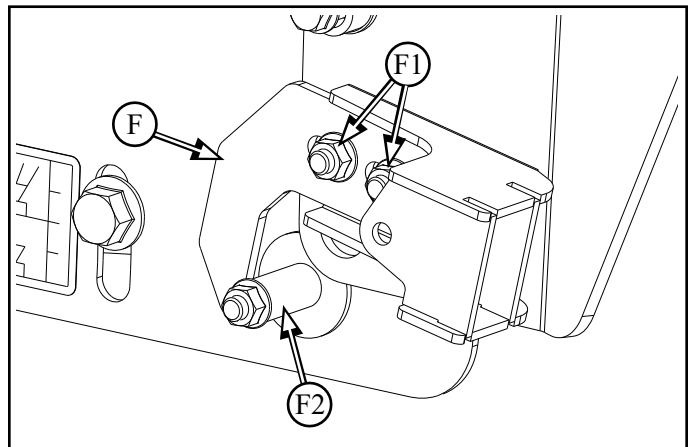
part included in CS1130BS box  
hardware located in CS625S bag

RP951A Gas Spring (A)	Qty 2
RP1058 Actuator (B)	Qty 2
CS171B Tailboard Guard (D)	Qty 2
CS990BA Reflector Bracket (D)	Qty 2
CS991Z Spacer Reflector (E)	Qty 2



**11.1.1** In order to position the tailboards, the installed hook (F) will have to be removed (F1) and then reattached with the tailboard in the horizontal position which will allow the hook to be on the front side of the pin (F2)  
- both sides

Note: Tailboard stop hook (F) can be adjusted if tailboards do not line up

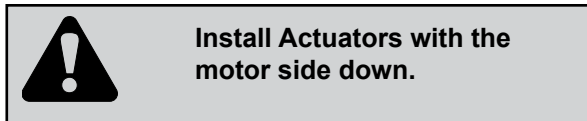




**11.2.2** Install gas shock (**A**) on to chopper and tailboard studs, with:

- M8 x 20 flange bolt (**A1**) x2
- both sides

**11.2.3** Install Actuator RP1058 (**B**)



**11.2.4** Install base (**B2**) of actuator (**B**) in to bracket (**C**) on chopper with:

- M8 x 40 flange bolt and lock nut (**B1**)

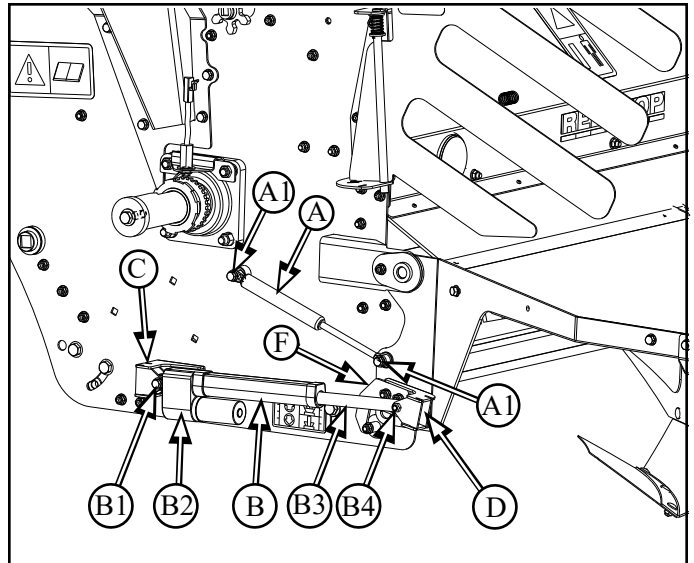
**11.2.5** Install shaft (**B3**) of actuator (**B**) in to bracket (**D**) on tailboard with:

- M8 x 40 flange head bolt and lock nut (**B4**)

**11.2.6** Adjust tailboard stops (**F**) so that there is still some stroke left in the gas shock (**S**)  
124mm - 127mm (4 7/8" - 5")

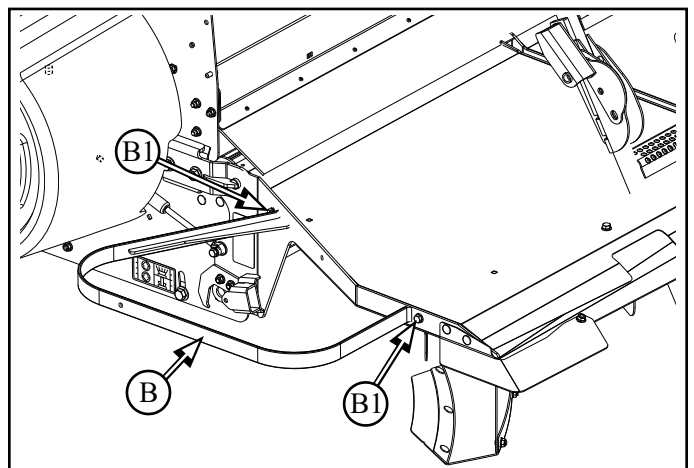
**11.2.7** Repeat for other side

**11.2.8** Install wire harness **RP892** (**W**)

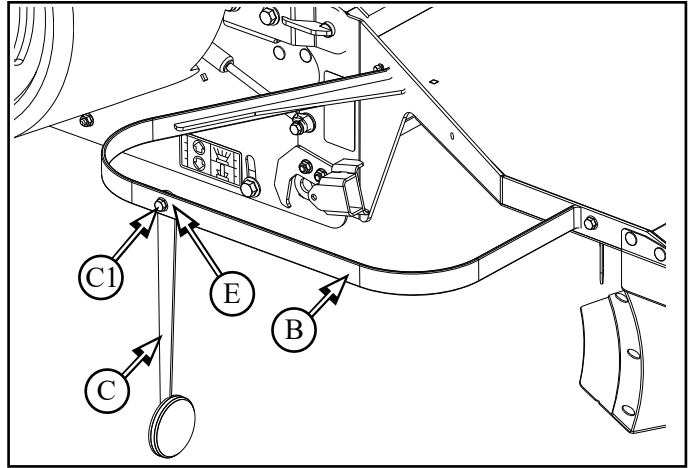


**11.3** Install tailboard guard (**B**) to side of tailboard, with:

- M8 x 20 flange bolt and flange nut (**B1**) x 2
- both sides



- 11.4** 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

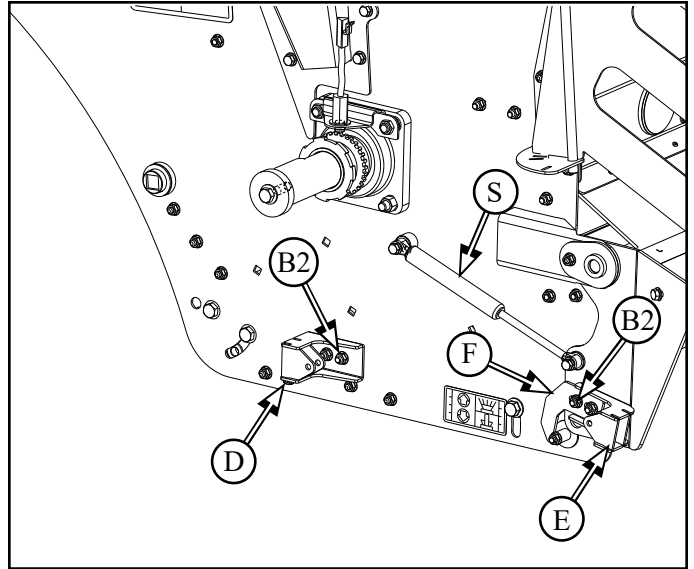


**11.3** If your combine is NOT equipped with electric actuators and you require these, order kit #47941043 from Case IH

**11.4** If your combine is NOT equipped with electric actuators and you require a mechanical control, order kit #CG314K from Redekop

**Manual Control**

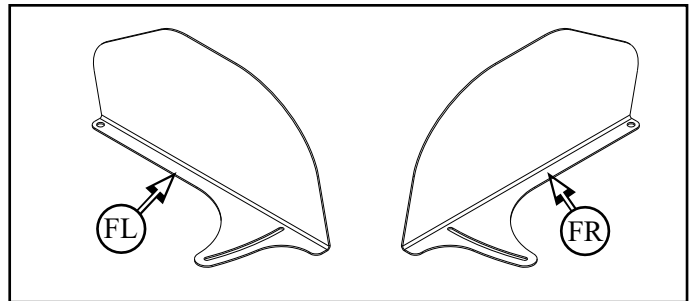
- 11.4.1** Remove electric actuator mount brackets and tailboard lug stop (D, E & F) from chopper housing
- both sides



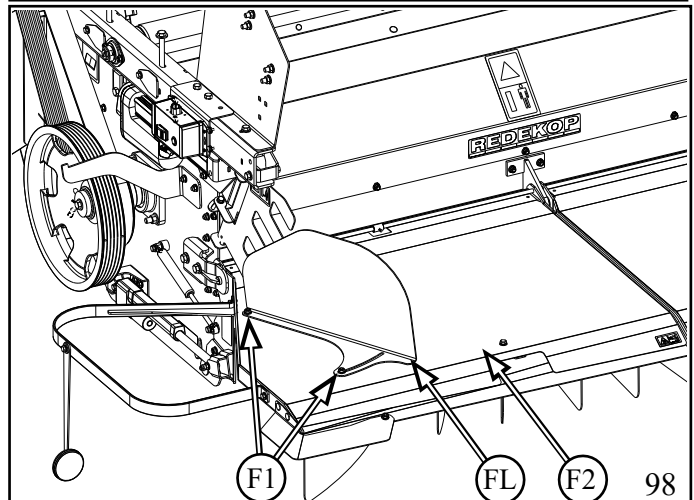
**11.5 Windrow Fin Installation**  
- required for windrowing

**Parts List:**

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



- 11.5.1** 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 right side



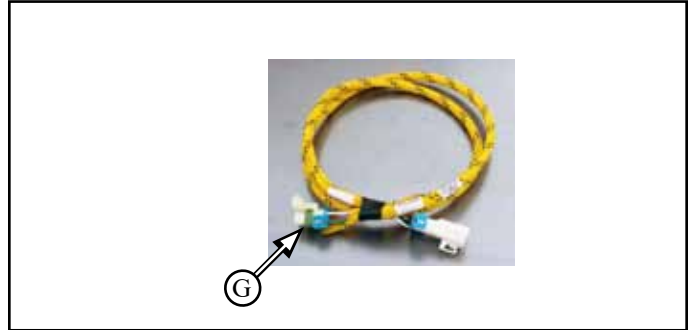
## 11.6 Tailboard Actuator Harness Installation

### - required for actuated tailboards

If SCU is being installed, reference SCU Installation Manual for harness installation

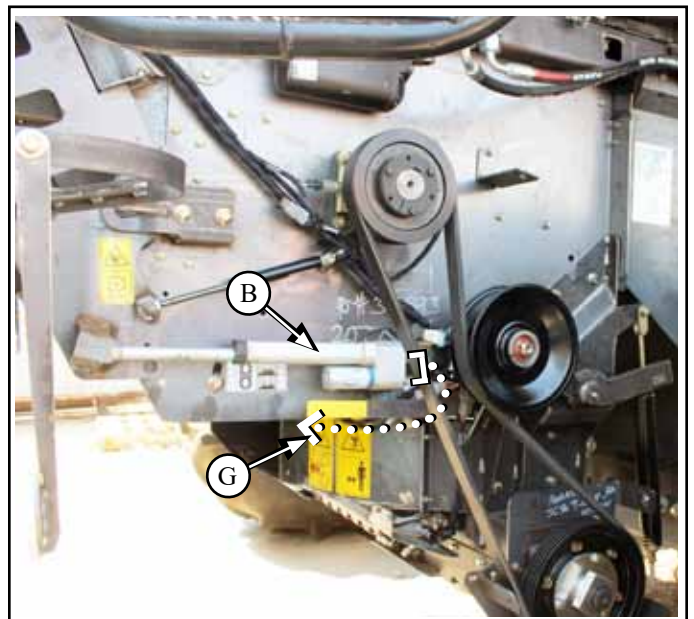
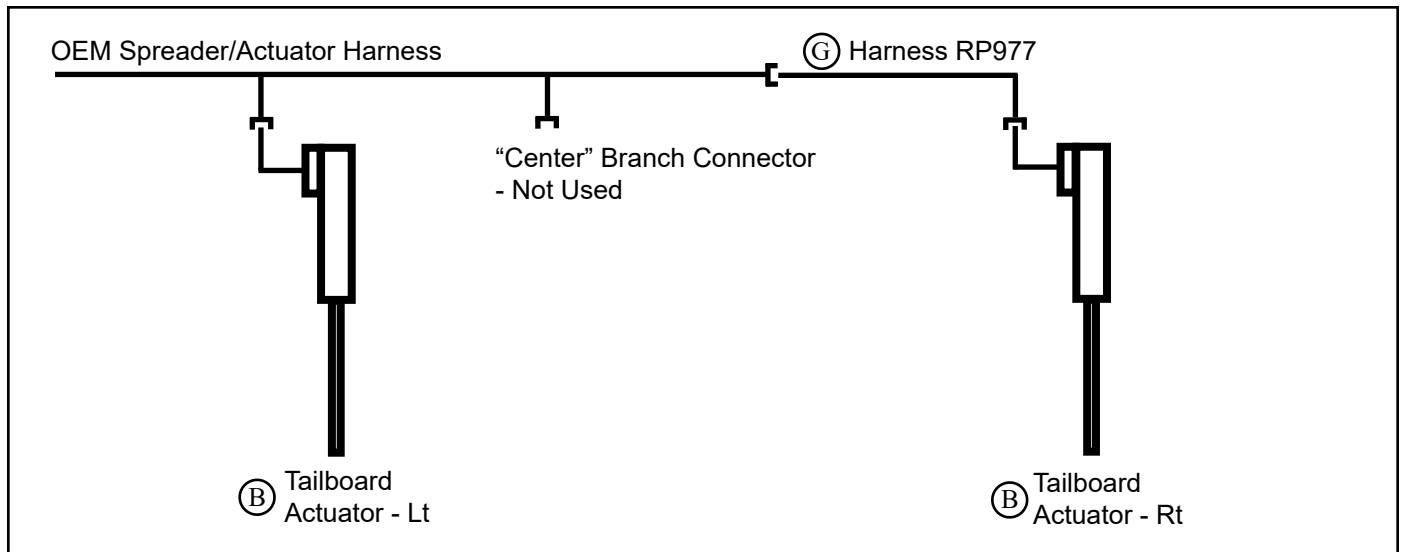
#### Parts List:

RP977 Harness Tailboard Actuator (G) Qty 1



#### 11.6.1 Install Tailboard Actuator Harness (G)

- connect harness (G) to right tailboard actuator (B)
- route harness underneath chopper to right OEM connector
- connect left OEM connector to left actuator (B)
- "Center" OEM branch connector is not used
- use cable tie straps to secure harness (G) running along/under chopper

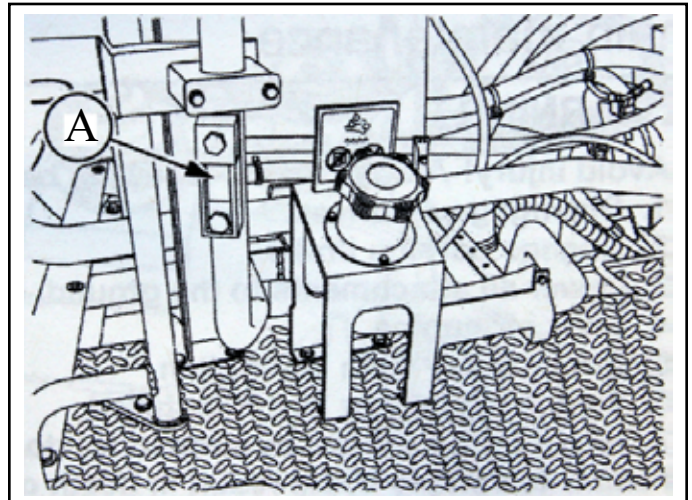


## 12 Hydraulic Oil Level



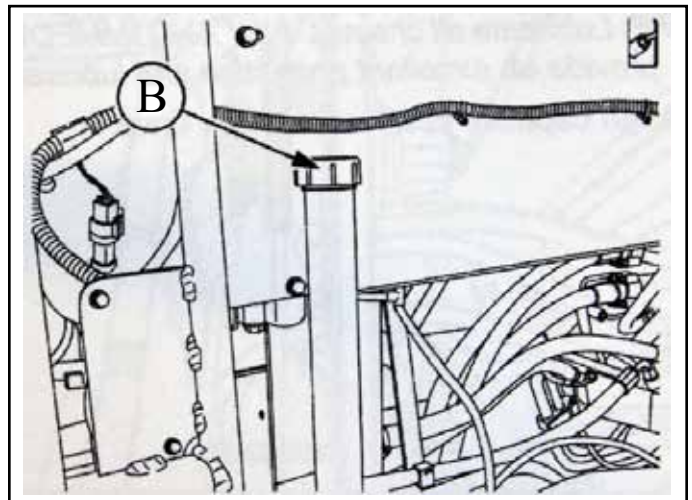
**12.1** Check the hydraulic oil level before starting and moving the combine.

Oil level can be checked through the sight glass (A) located on the top rear deck. The oil level should at a minimum reach the bottom of the sight glass.



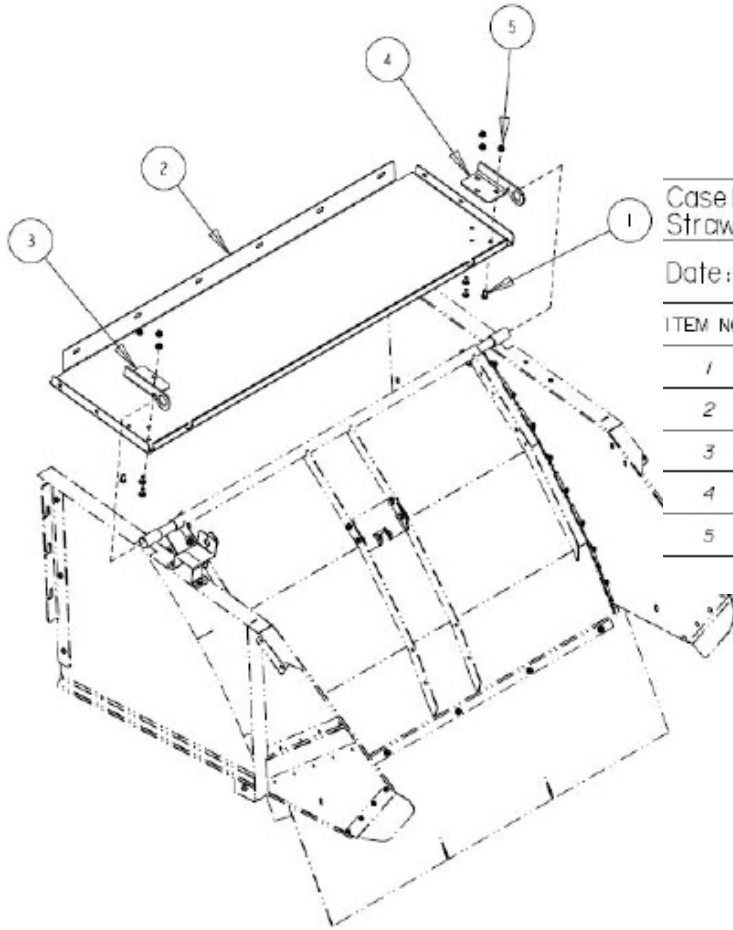
**12.2** If necessary, add oil through filler opening (B)

Reference combine operator's manual for exact instructions



# 13 Case AFX 20S Roof Upgrade

13.1 If you have a 20 Series combine and you require a Roof Upgrade, order kit #CS961K from Redekop



## Case IH 9120 Series MAV Chopper Straw Hood Roof Upgrade Components

Date: 24 JAN 2017

Serial No Range From:  
RM25015

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	B31M-0820	BOLT RH M8x20 CB.8 YZD ISO8678 Short Neck	6
2	CS961B	HOOD 20S AFX UPGRADE	1
3	CS978BL	PANEL SUPPORT BRACKET LT	1
4	CS978BR	PANEL SUPPORT BRACKET RT	1
5	N21M-08	NUT FLG M8 CB YZD Iso416I	6

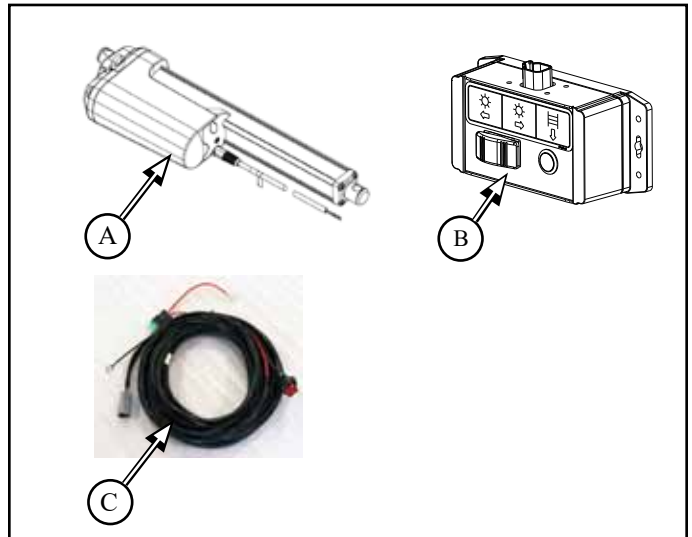
## 14 Case AFX Electronics Installation

If SCU is being installed, reference SCU Installation Manual for electrical installation

### Parts List:

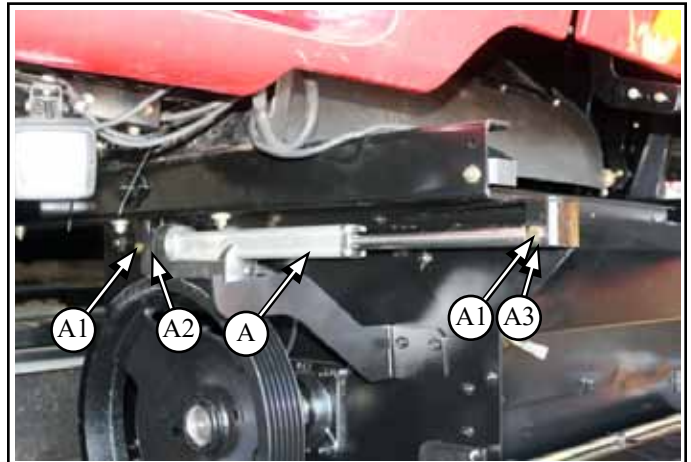
parts located in CS1137BS and SC490BS boxes  
hardware located in CS1154S and SC491S bags

RP827	Actuator (A)	Qty 2
RP1217A	Switchbox (B)	Qty 1
RP1216	Slider Actuator Harness (C)	Qty 1



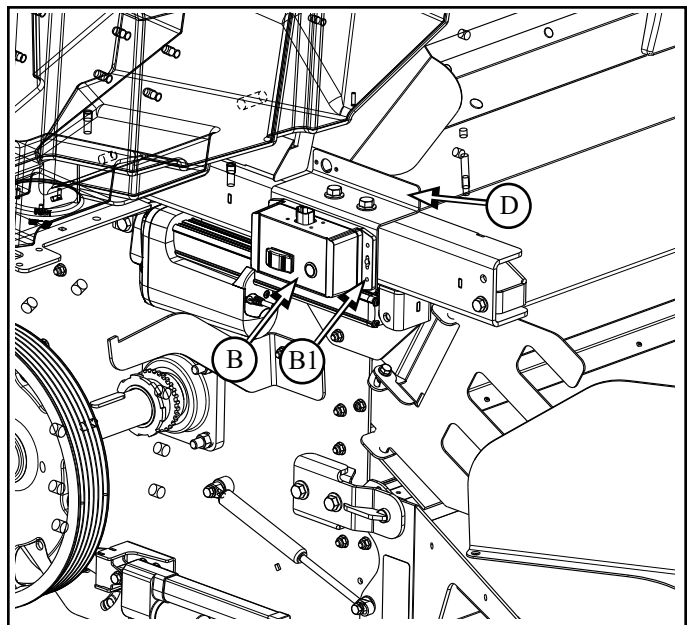
**14.1** Install actuator (A) to chopper interface and chopper with:

- M12 x 60 flange head bolt and flange nut (A1) x2
- ensure base of actuator (A2) is mounted on the interface and head (A3) is mounted on the chopper
- both sides



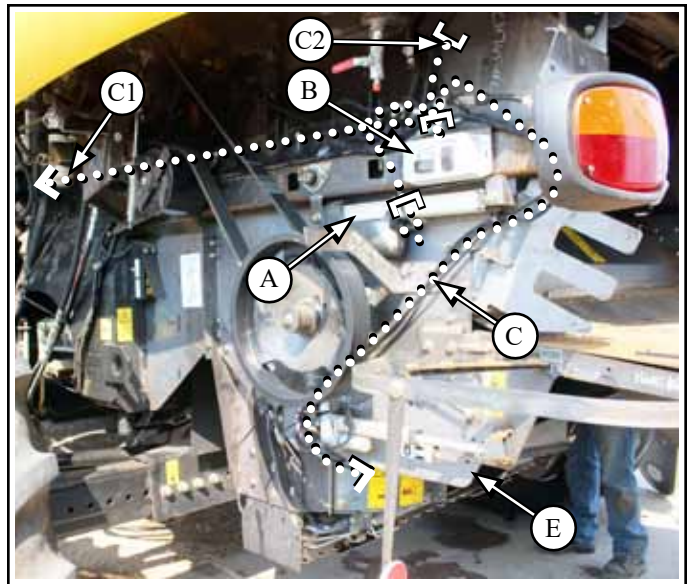
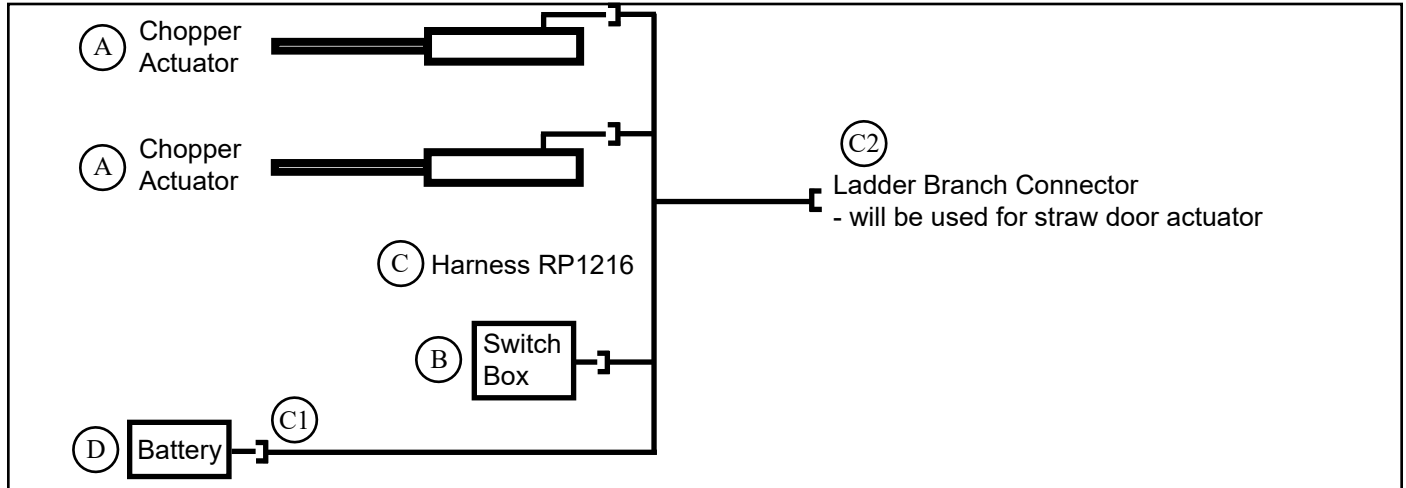
**14.2** Install switch box (B) to mounting plate (D) to plate below left corner panel with:

- #8-32 X .75 screw and locknut (B1) x4

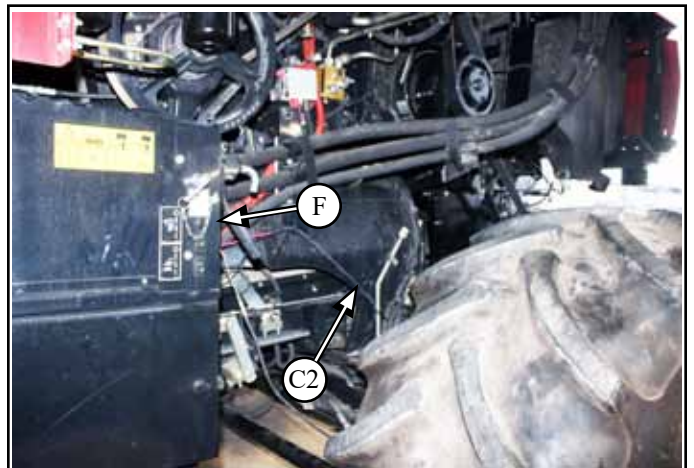


### 14.3 Install Chopper Actuator Harness (C)

- connect harness (C) to switch box (B)
- route harness as shown from switch box (B) to left chopper actuator (A)
- continue routing harness below chopper (E) to right chopper actuator (A)
- route "power lines" (C1) along left side of combine to the battery (F)
- branch (C2) for ladder will be used for straw door actuator
- use cable tie straps to secure harness to existing brackets, harness or hydraulic lines running along side of combine



### 14.4 Connet "power lines" (C1) to battery (F) terminals

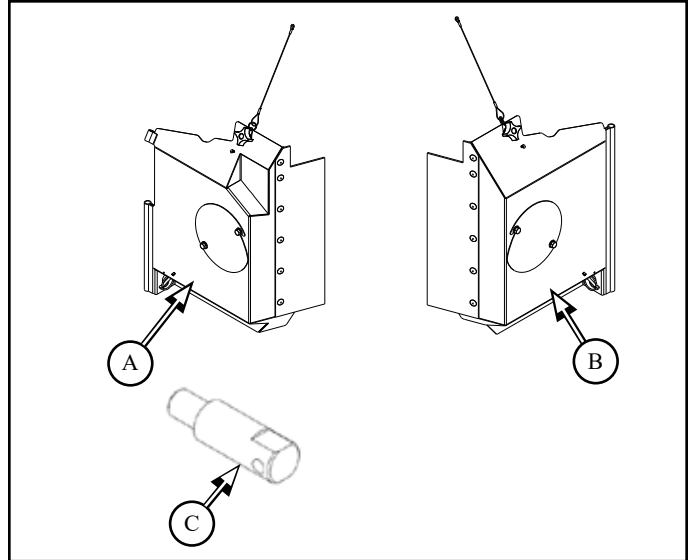


# 15 Vent Installation

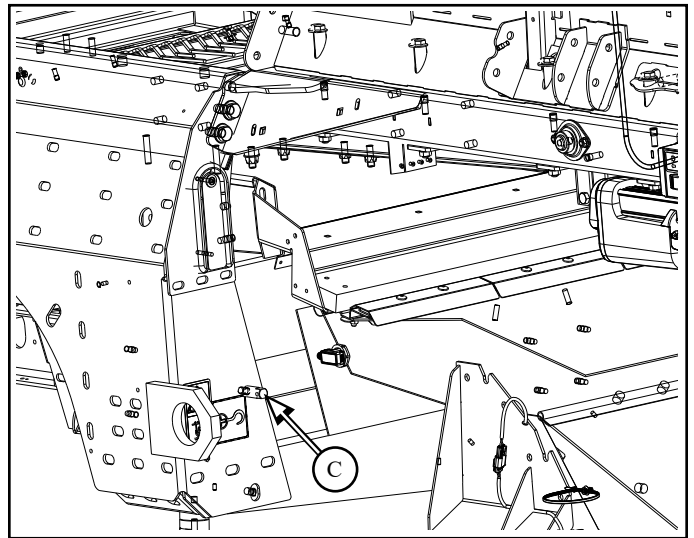
## Parts List:

parts located on pallet and CS1130BS box / CS625S bag

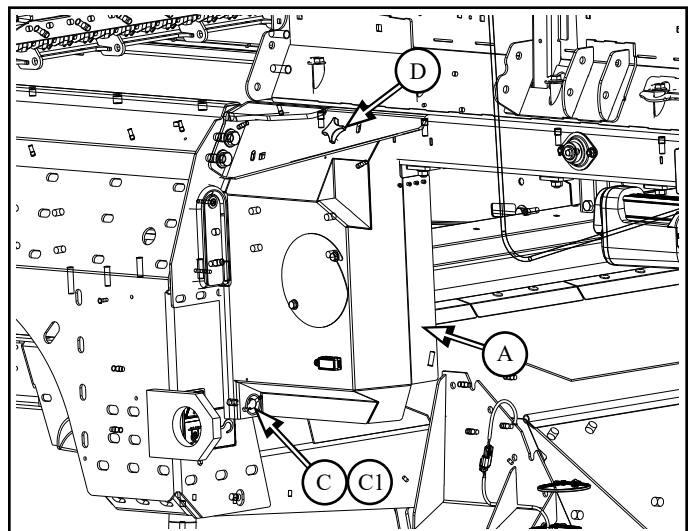
CS1162BAL Vent Left (A)	Qty 1
CS1162BAR Vent Right (B)	Qty 1
CS1035Z Vent Mount Pin (C)	Qty 2



**15.1** Thread in vent mount pin (C) into combine frame  
- both sides



**15.2** Install left and right vents (A & B)  
- slide over pin (C) and secure in place with lynch pin (C1)  
and knob (D) through existing hole in plate





## 16 Drive Shield Installation

### Parts List:

RP1172A Drive Shield AFX (A)

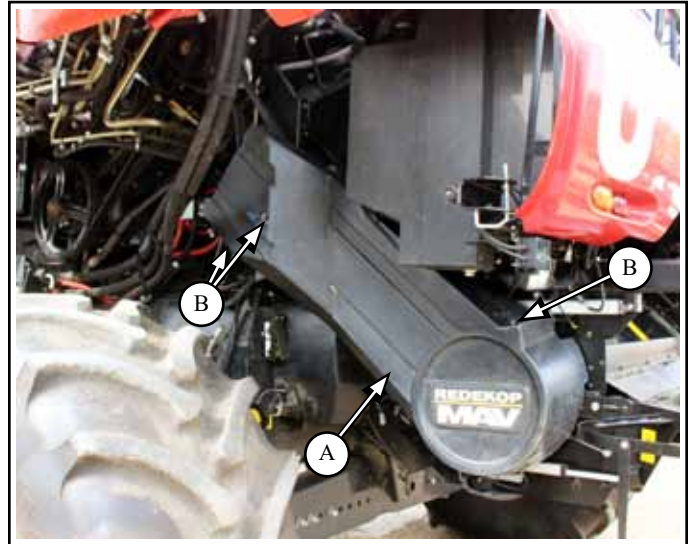
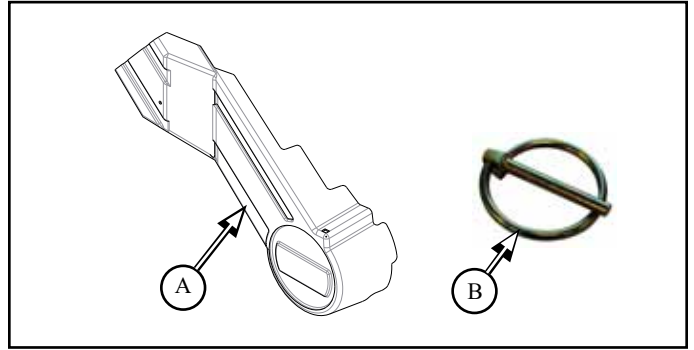
Qty 1

RP1105 Lynch Pin (B)

Qty 3

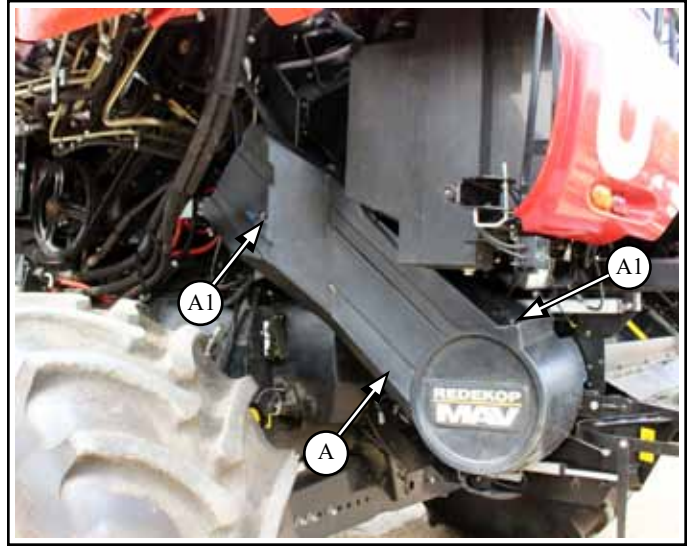
**16.1** Install drive shield (A) over pins on mounting brackets

- secure in place with lynch pin (B) x3



## 17 Access to Sieves

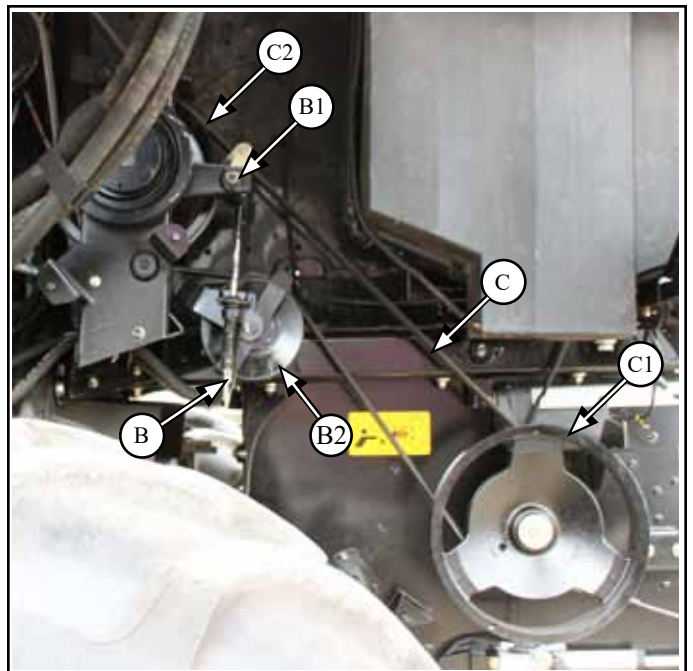
- 17.1** Remove drive belt shield (A)  
- remove pins (A1) x2



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

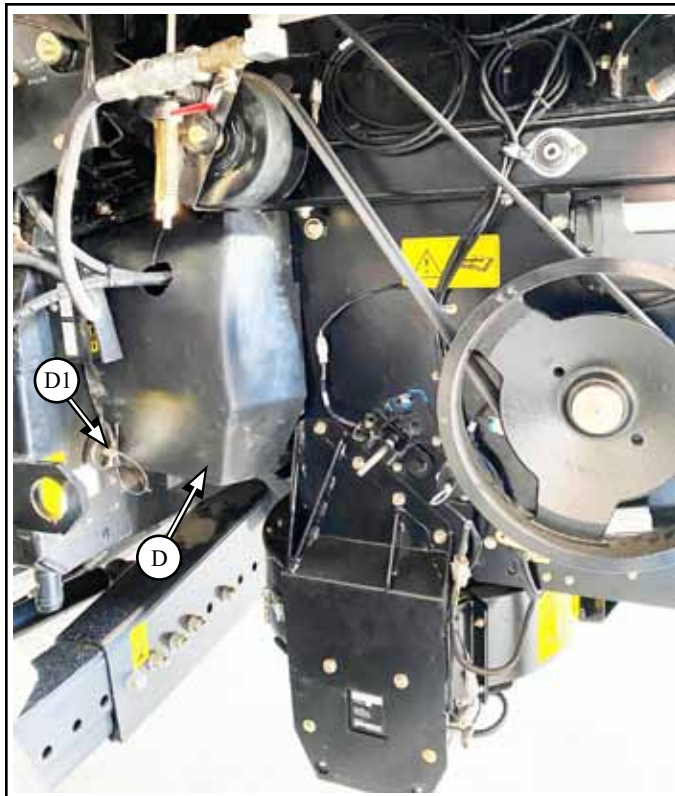
**17.2.1** Move belt (C) off of bottom sheave (C1)

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



**17.3 Remove vent covers (D)**

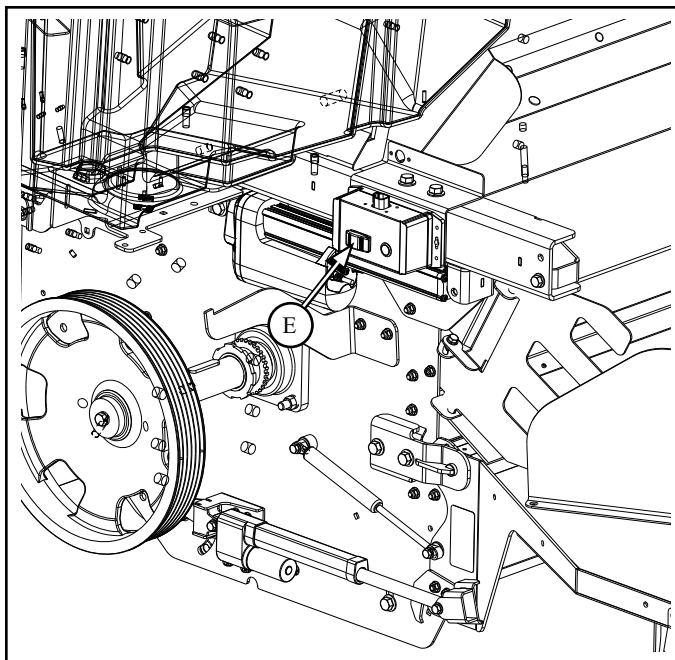
- remove pin (D1)
- both sides



**17.4 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!**



# 18 Software Update

## 30 and 40 Series

### 18.1 Update software:

Use the 240-Series EST to set the new configurations on 230-Series and 240-Series machines.  
(after the S/N break below)

The new cab machines start at S/N YDG218540

Software update required is: UCM1 - V33.33.0.0 or newer, UCM2 - V33.34.0.0 or newer (for S/N above and newer)  
Display Software (Part # 48109497 Combine Axial Flow) V30.8.0.0

Machines <YDG218540 do not get software update and would require the spreader/chopper speed sensor placed on the 7-tooth target.

### 18.1.2 Use EST to change the Machine Configuration for “Residue System.”

### 18.1.3 Set configuration to:

Configuration Name	Type ID	Value
Residue System Windrow*	0x209C	Impeller with 32cc Pump & 90cc Motor In-CAB Adjust
Residue System Non Windrow*	0x209C	None
Windrow Door	0x20A1	1 (installed)
Left Spread Deflector	0x2112	1 (installed)
Center Spread Deflector	0x2113	0 (not installed)
Right Spread Deflector	0x2114	1 (installed)
Hood Mount Chopper	0x2111	1 (installed)
Windrow Chute Extension	0x20A4	0 (not installed)

\*For MY14 and newer machines with existing 90cc spreader motor and 32cc pump with in cab adjust, Value = 6

\*For MY13 UCM machines with existing 74cc spreader motor and 28cc pump, Value = 3

\*Note - Installing a Windrow Chopper on a Combine with a Beater; will require a Speed Sensor and Bracket to be installed. This is required to calibrate the Straw Door Actuator.

### 18.2 Calibrate the windrow door and spread control actuators following the instructions in the Owner’s Manual

## 50 Series

### 18.3 Procedure to configure in cab parameters for Redekop Chopper on AFX



18.3.1 Select Toolbox icon (A)



18.3.1 Select residue tab (B)



18.3.2 Select in Cab Chopper Speed (C)



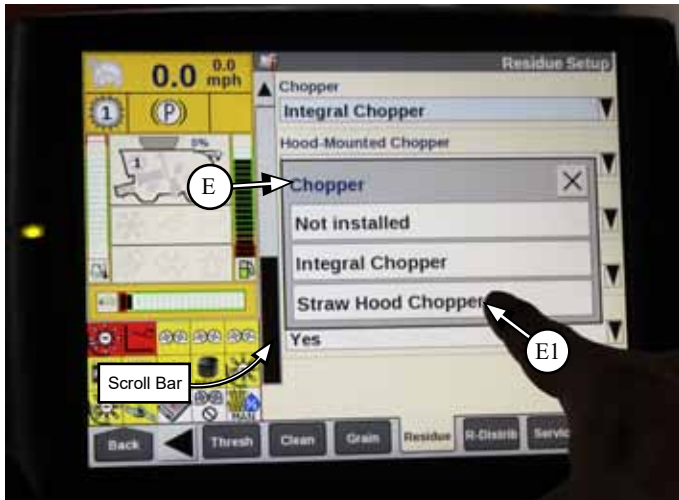
18.3.2.1 Select No (C1)



18.3.3 Select in Cab Windrow Door (D)



18.3.3.1 Select Yes (D1)



18.3.4 Scroll down the page and select Chopper (E)

18.3.4.1 Select Straw Hood Chopper (E1)



18.3.5 Scroll down the page and select Hood Mounted Chopper (F)

18.3.5.1 Select Yes (F1)



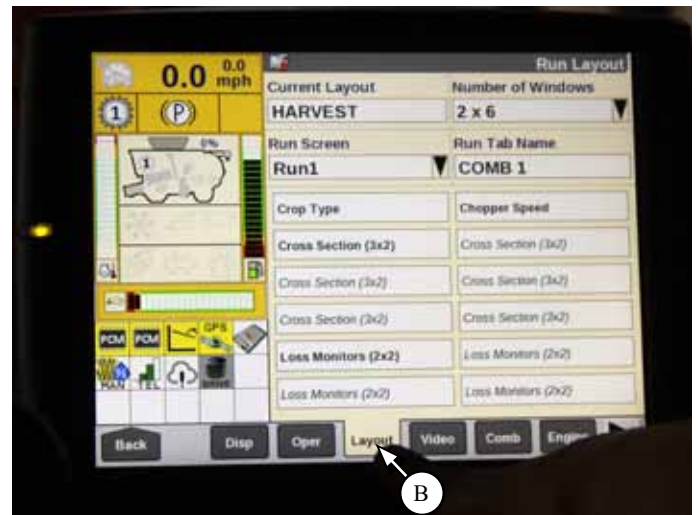
18.3.6 Scroll down the page and select Center Spread Deflector (G)

18.3.6.1 Select No (G1)

**18.4** Procedure to configure in cab parameters for Redekop Straw Door Actuator on AFX



**18.4.1** Select Toolbox icon (A)



**18.3.1** Select Layout tab (B)



**18.4.1** Select Chop to Swath (C)



**18.4.2** Select Door Position (C1)



# CAUTION

**Ensure that the Hydraulic Fittings have been tightened**



# CAUTION

**CHECK HYDRAULIC FITTINGS FOR LEAKS**



# 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

**DO NOT RUN THE COMBINE WITHOUT HYDRAULIC OIL**



# 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)
M10 - flanged	54 / (40)	57 / (42)
	- non flanged	49 / (36)
M12 - flanged	93 / (69)	134 / (98)
	- non flanged	85 / (63)
M16 - flanged	231 / (171)	331 / (244)
	- non flanged	210 / (155)



