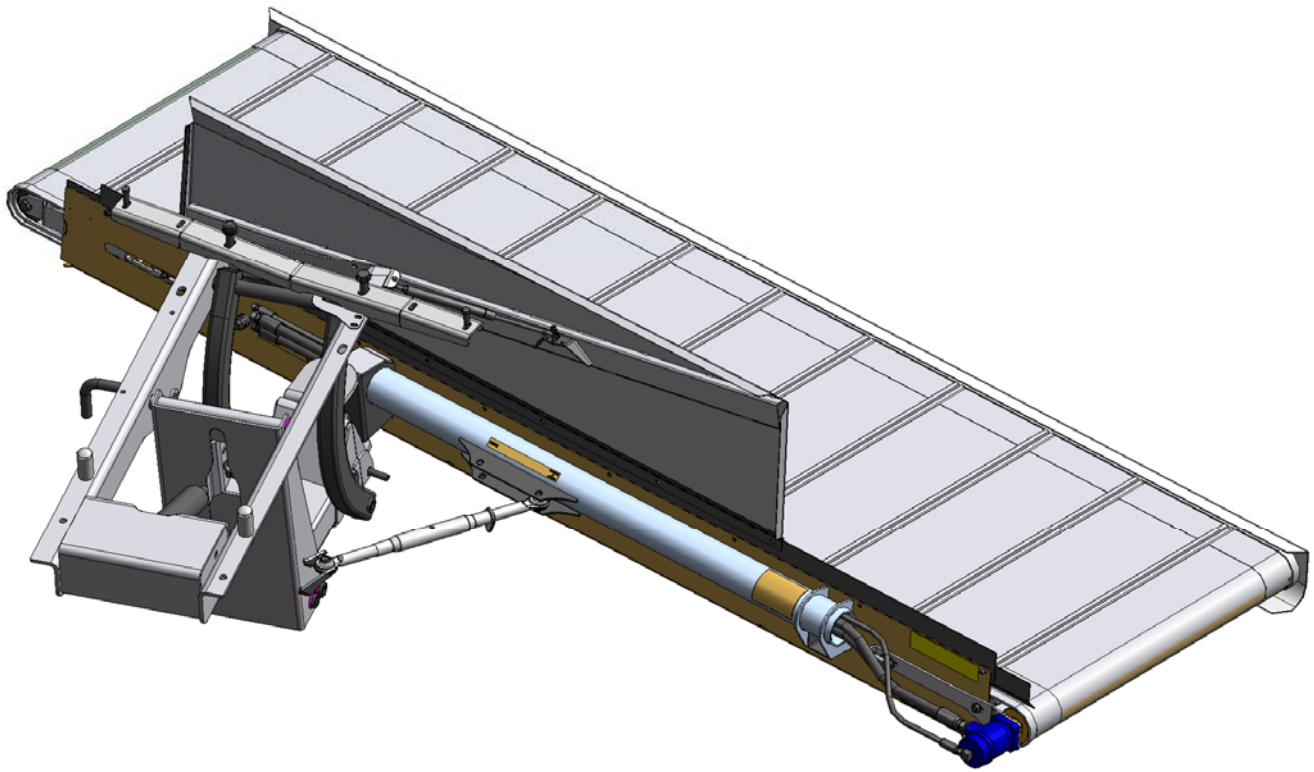


# **Double Windrow Attachment for M Series Self-Propelled Windrowers**

SET-UP INSTRUCTION / OPERATOR'S MANUAL / PARTS CATALOG

Part # 169216 Revision E



MACDON DOUBLE WINDROW ATTACHMENT

# MacDon M Series Self-Propelled Windrower DOUBLE WINDROW ATTACHMENT



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Published: July 2013

*Original Instruction*

## INTRODUCTION

The Double Windrow Attachment (DWA) allows the combining of two windrows of conditioned material close together to be picked up by a forage chopper. This unit may be mounted on the following MacDon-built self-propelled windrowers: M150, M155, M200, and M205. The system is for use with A-Series Auger Headers, R-Series Rotary Disc Headers, and D-Series Draper Headers with HC10 hay conditioners. The conditioned crop is deposited onto the side delivery system draper and delivered to the side of the windrower when required. Raising the side delivery system shuts off the draper and allows the crop to be deposited between the windrower wheels as it would be without the side delivery system.

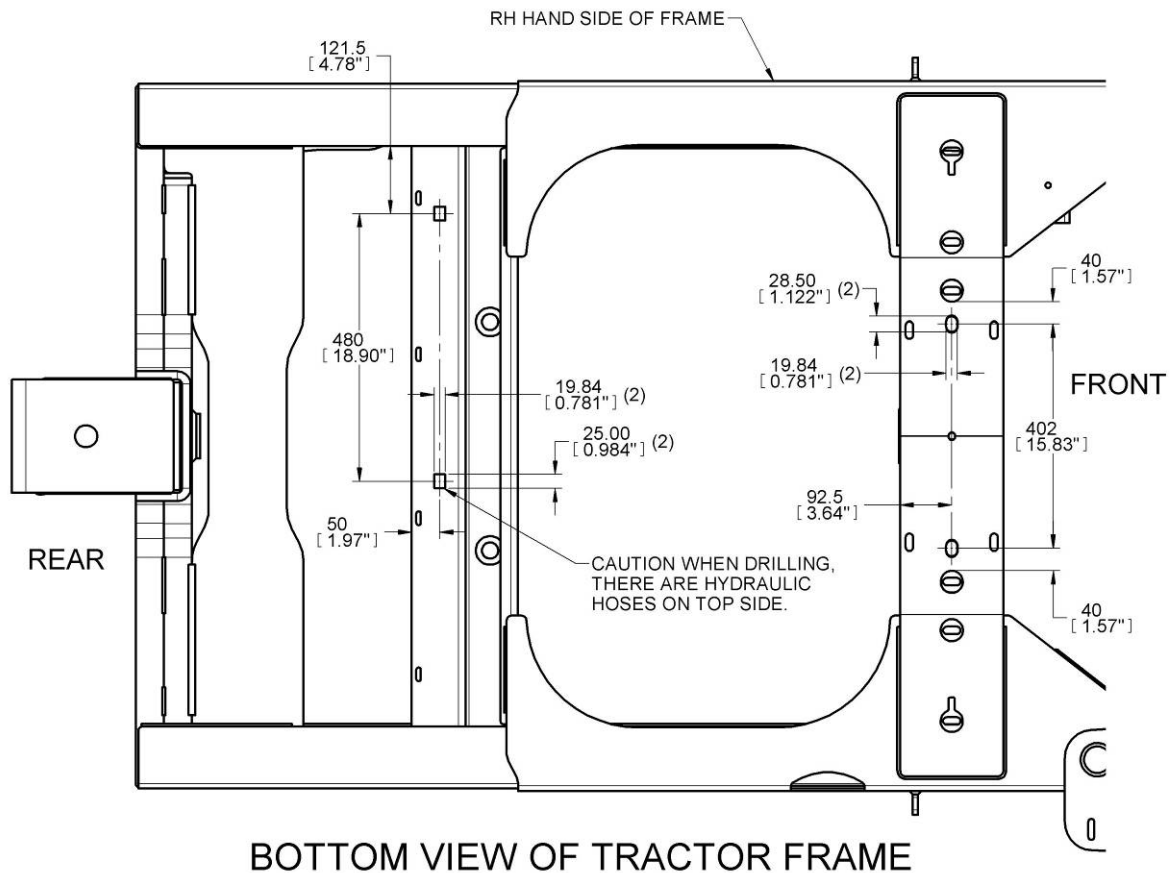
**NOTE:** Depending on windrower model year, a software update may be required for proper function of the auxiliary lift valve block provided with your DWA. Refer to Service Bulletin SB1210 for details.

# SET-UP INSTRUCTIONS

**NOTE:** This unit fits only the windrower models listed in the *Introduction*. It cannot be installed on the M100/M105 Self-Propelled Windrower models.

## Rework required for pre-2008 windrowers

Before installing the DWA on a windrower built prior to production year 2008, follow these instructions:



1. If not present, drill four holes 0.781 in. (20 mm) diameter at the locations shown above. There are hydraulic hoses above the two rear holes. **Make sure hoses are out of the way when drilling.** Ream/grind rear holes to make them square for square neck bolts. Slots are only required if holes do not line up with Double Windrow Attachment frame.

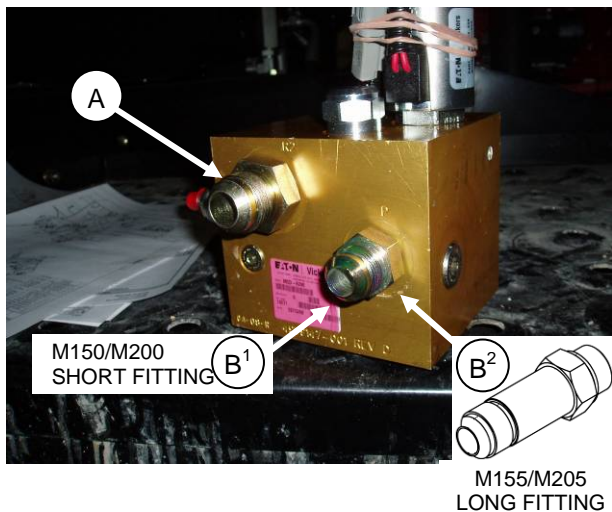
## SET UP INSTRUCTIONS

### Draper drive block installation

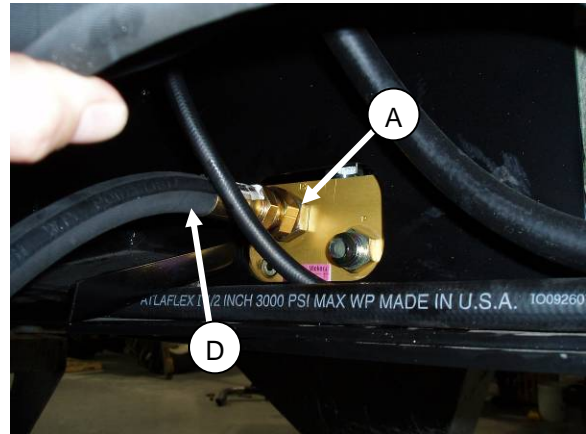


To install the draper drive block, follow these steps:

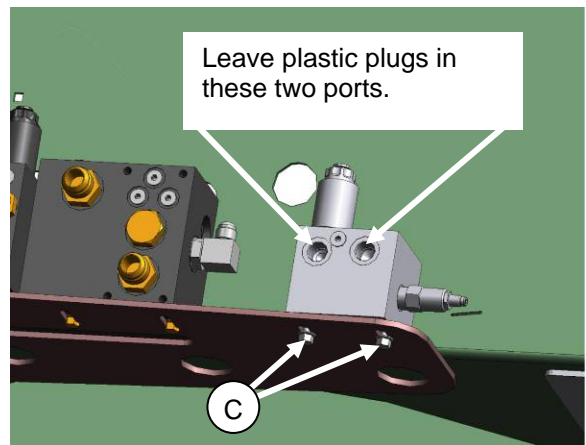
1. Move the left cab-forward platform to the open position for access to the hydraulic valve blocks. Ensure the platform latch is engaged in open position.
2. Prepare DWA draper drive block:
  - Install #12 ORB X #12 JIC fitting (A) to port "R2" on DWA drive block.
  - **For M150/M200:** Install **regular** #10 ORB X #10 JIC fitting (B<sup>1</sup>) to port "P" on DWA drive block.
  - **For M155/M205:** Install **long** #10 ORB X #10 JIC fitting (B<sup>2</sup>) to port "P" on DWA drive block



3. Pre-install hose (D), supplied in kit, to fitting (A) at DWA drive block to simplify assembly.



4. Install DWA drive block to windrower left hand side frame with 3/8 in. serrated flange head bolts (C). Route hose and fittings (installed in step 3) through side frame, pointing towards the windrower engine and relief valve on block points to rear of windrower.

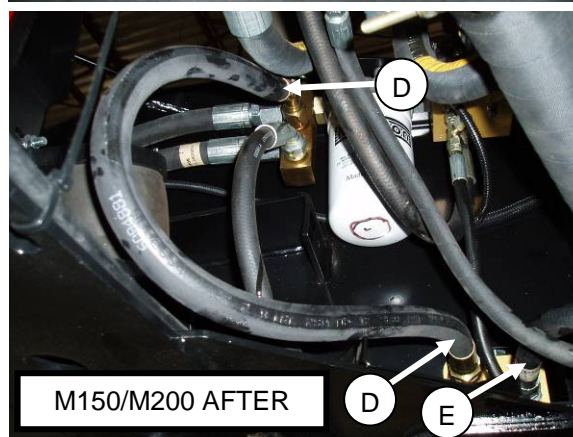
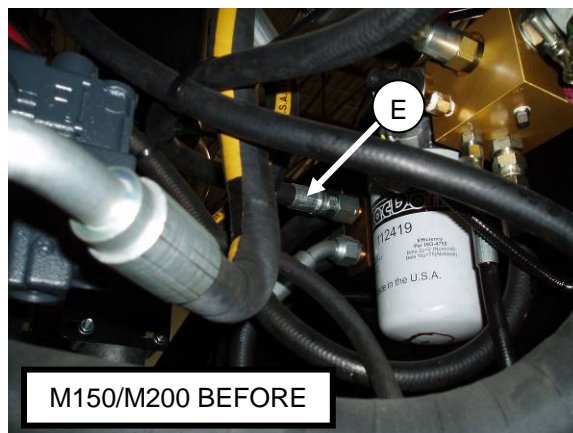
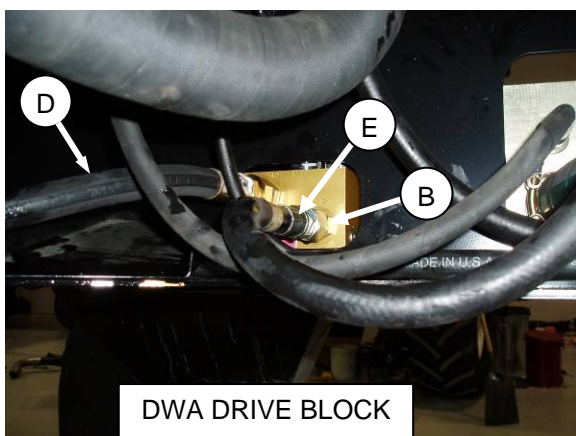




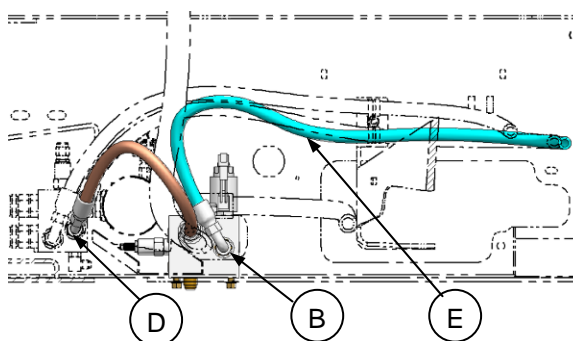
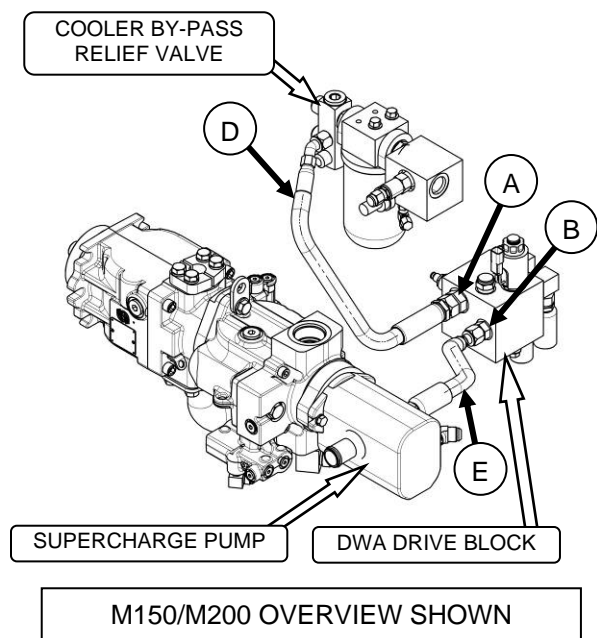
## SET UP INSTRUCTIONS

- Remove hose (E) from cooler by-pass relief valve and connect to fitting (B) at port "P" on DWA drive block. The other end of hose is connected to the super charge pump.

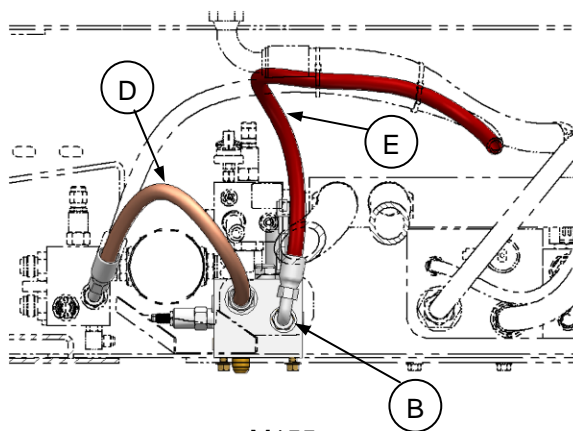
**NOTE:** Access to hose (E) can be from underneath windrower or by raising windrower hood and working from the left hand platform.



- Install the other end of hose (D) to cooler by-pass relief valve. This is where hose (E) was disconnected.



M205

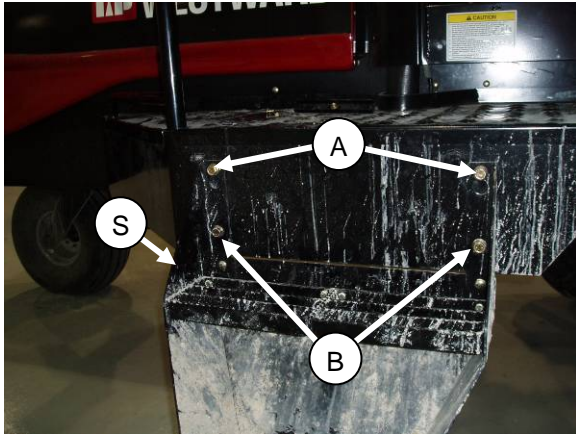


M155



## SET UP INSTRUCTIONS

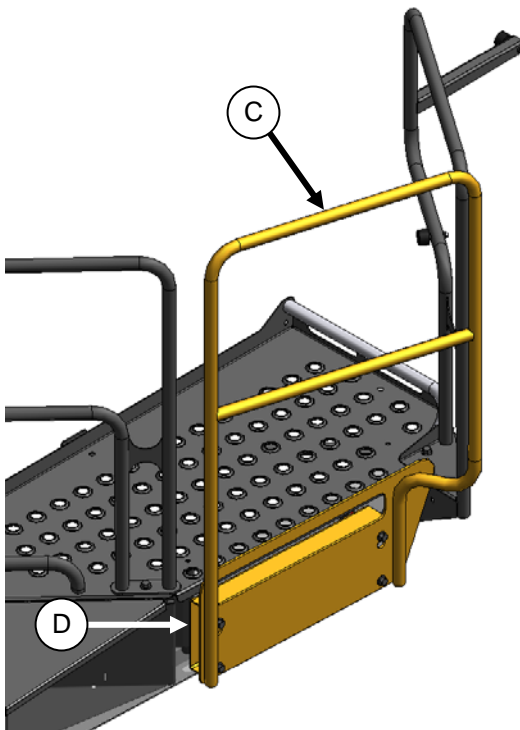
### Platform rail installation



To install the platform rail, follow these steps:

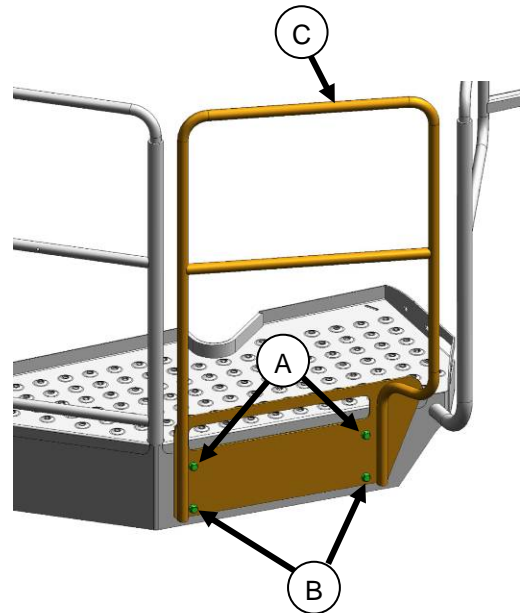
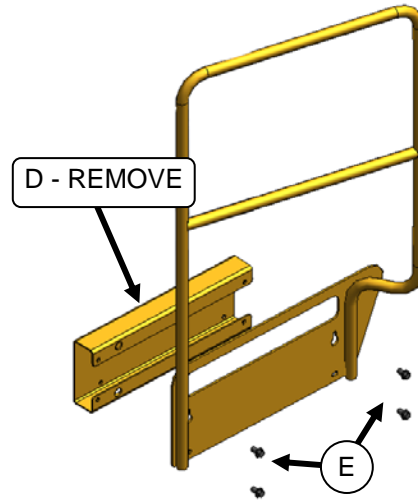
1. Remove right hand steps (S) from platform by loosening two top bolts (A) and removing two bottom bolts (B). Lift steps to detach at top keyhole slots (A). Retain bolts for next step.
2. Install rail (C) to right hand platform as follows:

**M155/M205:** Hang rail (C) complete with adapter plate (D) by engaging keyhole slots on top bolts (A). Install two bottom bolts (B) and tighten all four bolts.



M155 / M205 RAIL WITH ADAPTER

**M150 / M200:** Remove adapter plate (D) by removing four 1/2 NC x 1 in. flange bolts (E) and nuts. Hang rail (C) without spacer plate by engaging keyhole slots on top bolts (A). Install two bottom bolts (B) and tighten all four bolts.

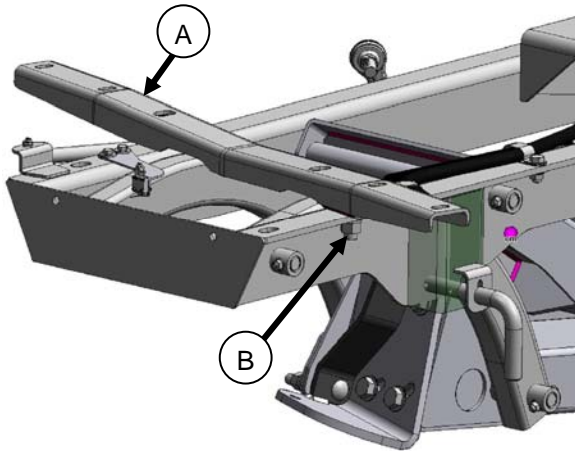


M150 / M200 RAIL WITHOUT ADAPTER

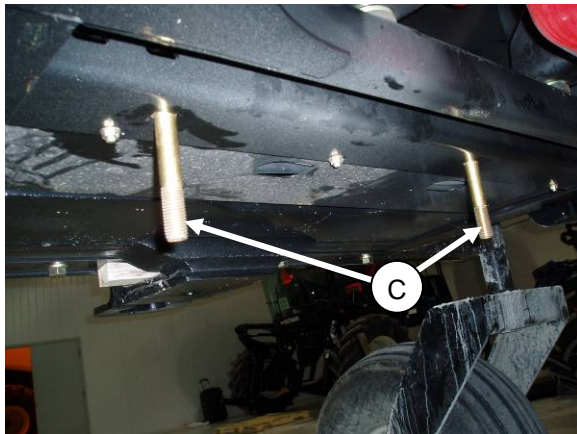
## SET UP INSTRUCTIONS

### Linkage installation

To install linkage, follow these steps:



1. Remove support (A) by removing nut (B).



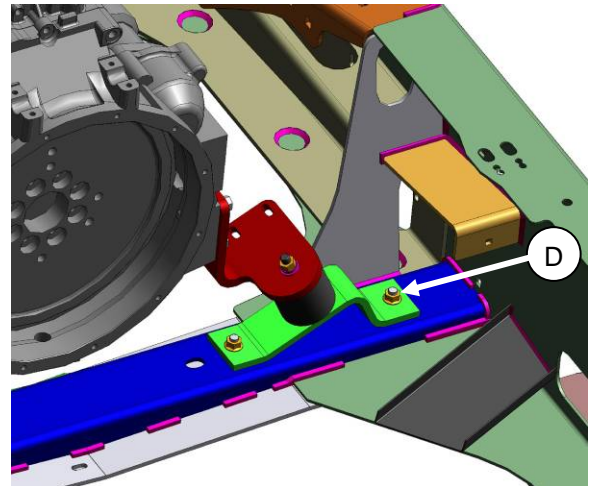
2. Locate in hardware kit two carriage head bolts, 3/4 x 4-1/2 in. long. Install bolts (C) in windrower frame member between the engine and caster wheels.

**NOTE:** Hoses will have to be moved to get the bolts in place.

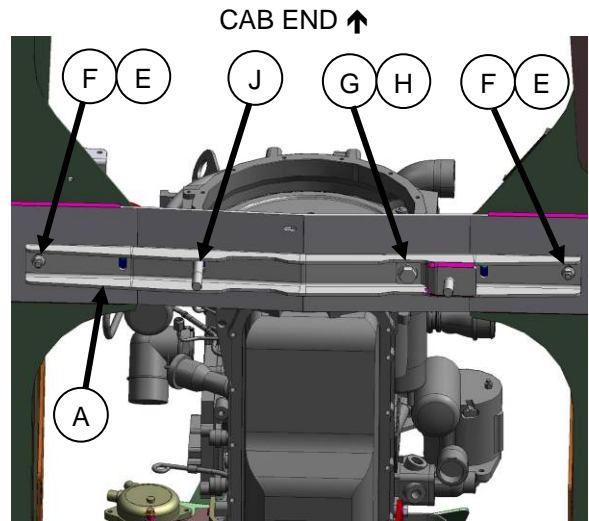
*If mounting on an M150/M155 Windrower, go to Step 3.*

*If mounting on an M200 Windrower, go to Step 5.*

*If mounting on an M205 Windrower, go to Step 7.*



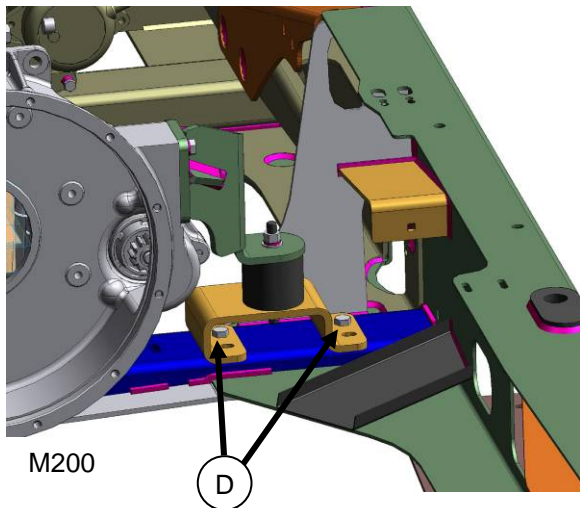
3. **M150/M155:** Remove the outer bolt and nut from the front engine mount at (D) on both left and right sides. Retain nuts for reuse.



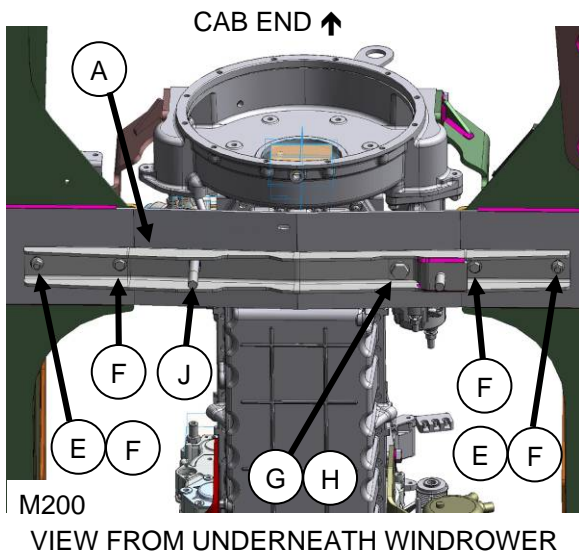
VIEW FROM UNDERNEATH WINDROWER

4. **M150/M155:** Mount support (A) to windrower frame with two 1/2 x 2-3/4 in. long hex head bolts (F), flat washers (under bolt heads) and nuts (E). These bolts replace the engine mount bolts (D) removed in step 3.
  - From underneath, install a 3/4 x 3-1/2 in. long hex head bolt (G) with flat washer (H) under bolt head. Secure with flat washer, lock washer and nut on top side.
  - From top side, install a 3/4 x 5-1/2 in. long hex head bolt (J) with flat washer (H) under bolt head. Do not install nut on bolt (J).
  - Go to Step 8.

## SET UP INSTRUCTIONS



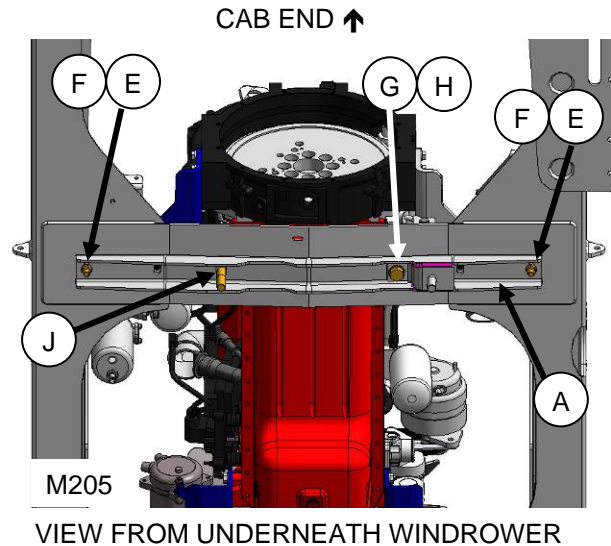
5. **M200:** Remove four bolts (D) from the front engine mounts, two on left side and two on right side. Retain nuts for reuse.



6. **M200:** Mount support (A) to windrower frame with four 1/2 x 2-3/4 in. long hex head bolts (F), flat washers (under bolt heads) and nuts (E). These bolts replace the engine mount bolts (D) removed in step 5.
- NOTE:** Outer two bolts (F) are installed with heads on topside and inner two bolts (F) are installed with heads underneath.

- From underneath, install a 3/4 x 3-1/2 in. long hex head bolt (G) with flat washer (H) under bolt head. Secure with flat washer, lock washer and nut on top side.

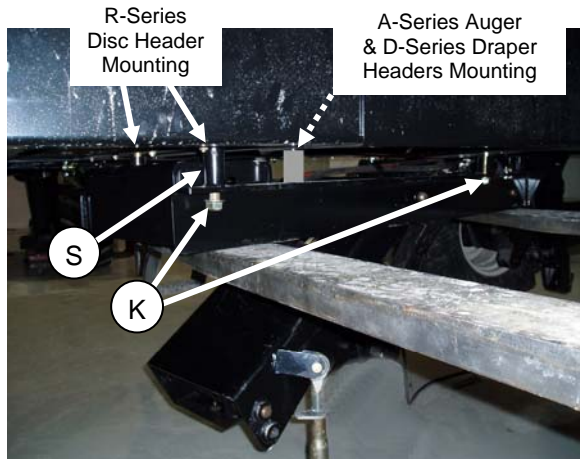
- From top side, install a 3/4 x 5-1/2 in. long hex head bolt (J) with flat washer (H) under bolt head. Do not install nut on bolt (J).
- Go to Step 8.



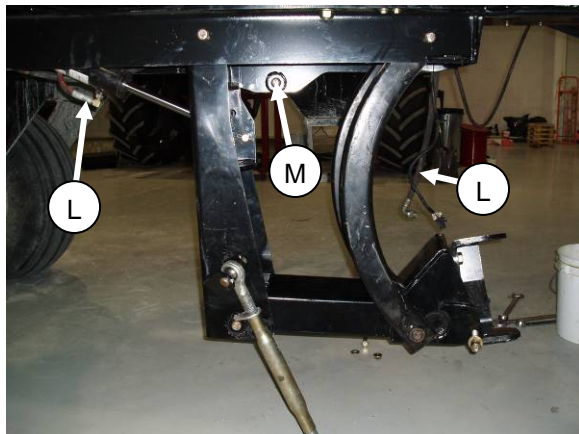
7. **M205:** Mount support (A) to windrower frame with two 1/2 x 2-3/4 in. long hex head bolts (F), flat washers (under bolt heads) and nuts (E).
- From underneath, install a 3/4 x 3-1/2 in. long hex head bolt (G) with flat washer (H) under bolt head. Secure with flat washer, lock washer and nut on top side.
  - From top side, install a 3/4 x 5-1/2 in. long hex head bolt (J) with flat washer (H) under bolt head. Do not install nut on bolt (J).



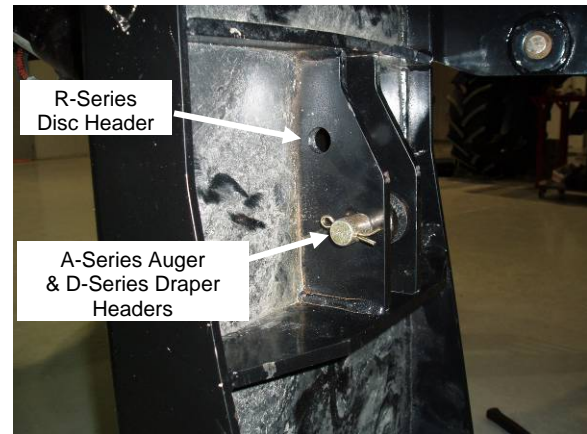
## SET UP INSTRUCTIONS



8. Support linkage assembly with a forklift.  
**NOTE:** Make sure fork is not lifting against cylinder fitting.
9. **M150/M155/M200:** Align linkage with four bolts in windrower frame. Locate in hardware kit two spacers (S), 1-1/2 in. OD x 1 in. ID x 2-3/4 in. long. Mount linkage in the most forward position (as shown) if used with an R-Series Disc Header and mount in the most rearward position if used with A-Series Auger Header or D-Series Draper Header. Position spacers (S) on rear bolts and install four flat washers, lock washers and nuts at (K) and tighten.
10. **M205:** Align linkage with four bolts in windrower frame. Mount linkage in the most forward position (as shown) if used with an R-Series Disc Header and mount in the most rearward position if used with A-Series Auger Header or D-Series Draper Header. Install four flat washers, lock washers and nuts at (K) and tighten.



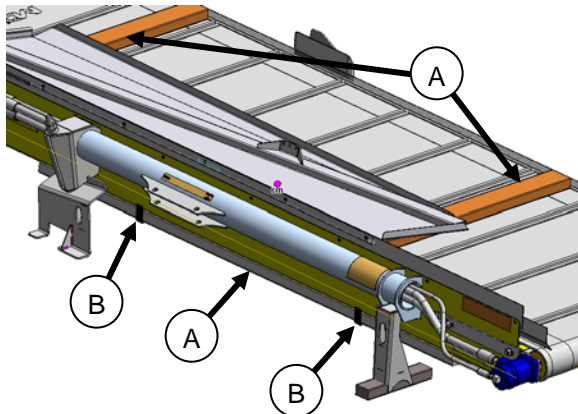
11. Lower linkage by hand by first pulling on safety pin (M) on the LH side of linkage. Remove plugs at end of lift cylinder hoses (L) if needed to remove air from hoses.



12. Cylinder pivot must be in the lower hole (shown) for A-Series Auger or D-Series Draper Headers and upper hole for R-Series Rotary Disc Headers. Move pin to upper hole if used with R-Series Rotary Disc Header.

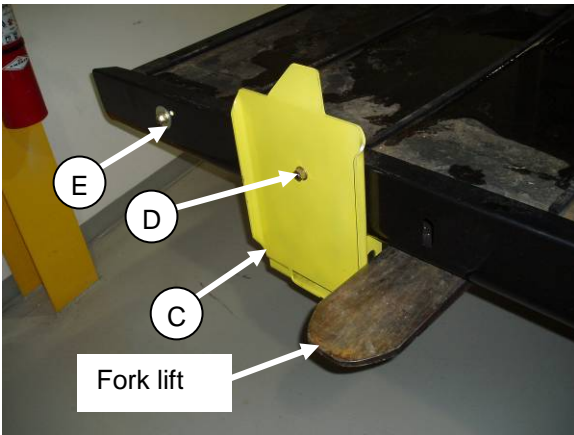
## SET UP INSTRUCTIONS

### Deck Installation

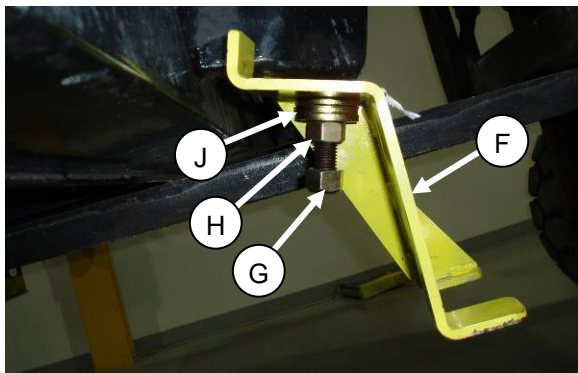


To install the DWA deck, follow these steps:

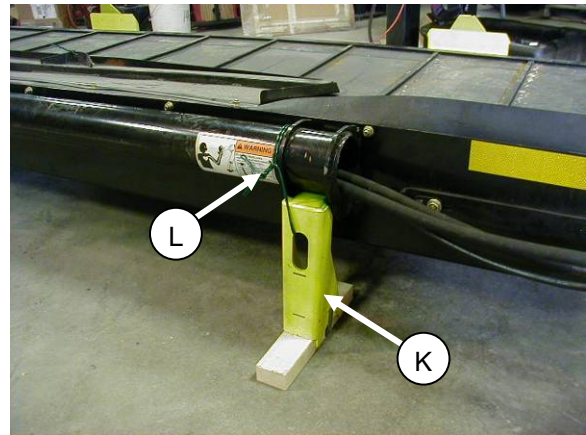
1. Remove 2X4's (A) by removing banding (B) and discard.



2. Support deck with fork lift. Forks should be inboard of shipping stand (C). Remove two shipping stands (C) at front deck by removing nut (D). Discard shipping stands. Re-install nut (D) with washer (E). Washers are supplied in hydraulic kit.



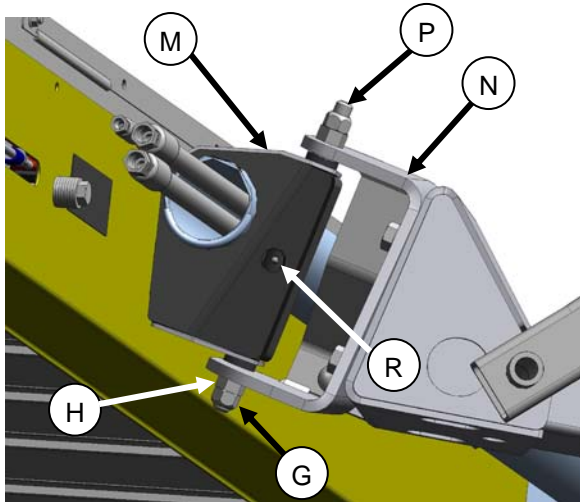
3. Remove shipping stand (F) at rear of deck by removing two nuts (G) and (H) and washers (J). Discard shipping stand and washers. Retain nuts for re-use.



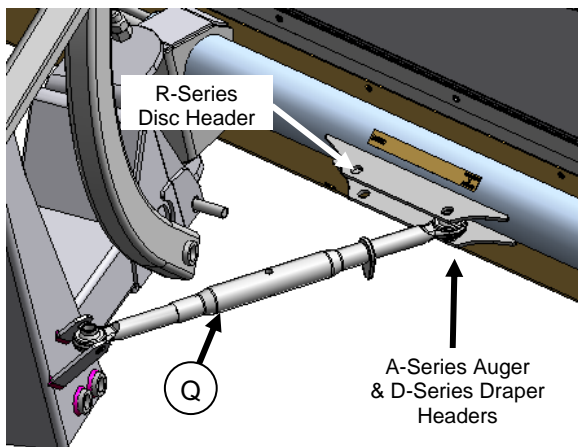
4. Remove shipping stand (K) by removing wire (L). Discard shipping stand.
5. Position deck on right hand side of windrower. Deck is now ready to be assembled to the linkage underneath the windrower.



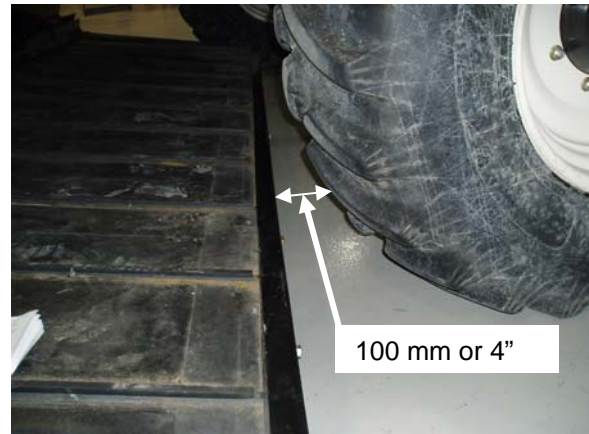
## SET UP INSTRUCTIONS



6. Support deck with a floor jack or fork lift at each end and position the deck pivot (M) in to the linkage clevis (N). Make sure there is a loose bushing inside the deck pivot.
7. Align the deck pivot with holes in clevis by rising or lowering the floor jack and insert shaft (P). At bottom install one regular hex nut (H) and torque the nut to 250 ft-lbf. Then install lock nut (G) and tighten against nut (H).  
**IMPORTANT:** Nuts need to have the proper torque applied. Add grease to grease zerk (R).

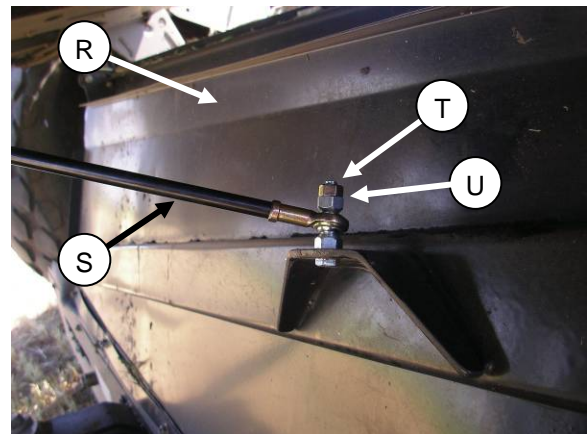


8. Attach turnbuckle (Q) from linkage to deck. Use outer pivot (shown) if used with A-Series Auger or D-Series Draper Header and use inner pivot if used with an R-Series Disc Header.



9. Adjust turnbuckle (Q) length so the deck is approximately 4 in. (100 mm) from the right hand drive tire. The turnbuckle length should be about 21 in. (530 mm) long for the R-Series Disc Header and 25 in. (630 mm) long for the A-Series Auger or D-Series Draper Headers.

**NOTE:** The lift cylinder is single acting and it is pressurized with the draper drive circuit. Therefore when the deck is setup for the R-Series Disc Header the windrower needs to be running for the deck to be in its most forward position. This adjustment can be fine-tuned when the hydraulics setup is complete.

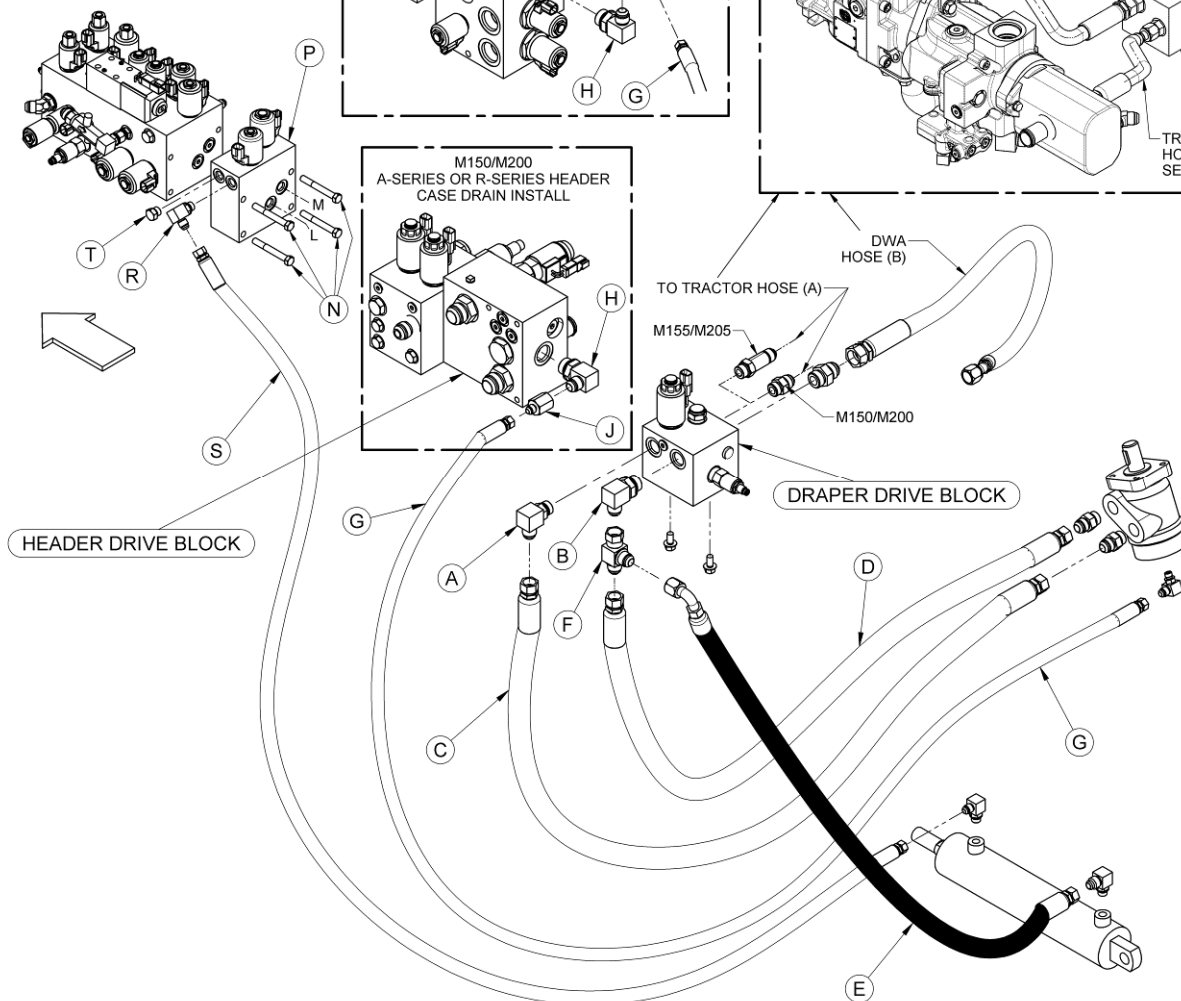
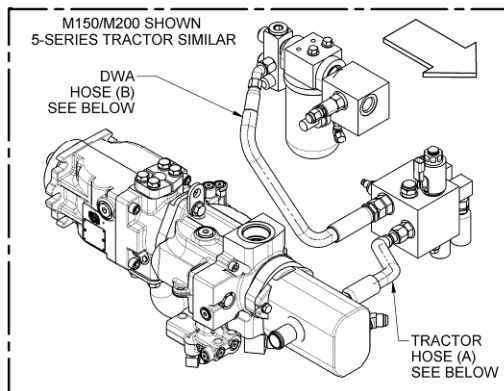
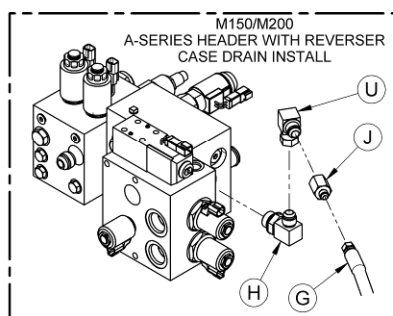
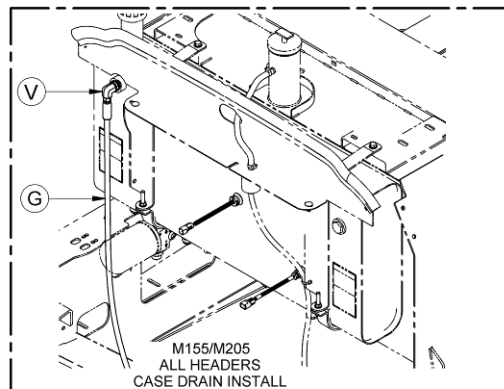
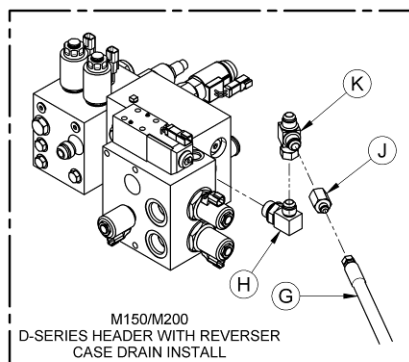
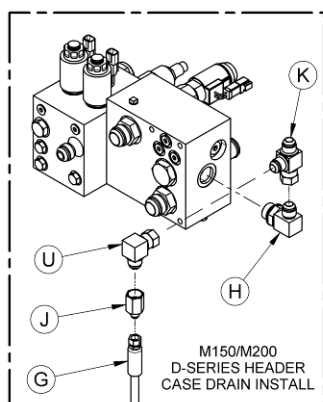


10. Raise backsheet (R) on deck and remove two top nuts (T) and (U). Install gas shock (S) in center hole and secure with nuts (U) and (T). Make sure taper of nut (U) is facing the gas shock rod end as shown.



# SET UP INSTRUCTIONS

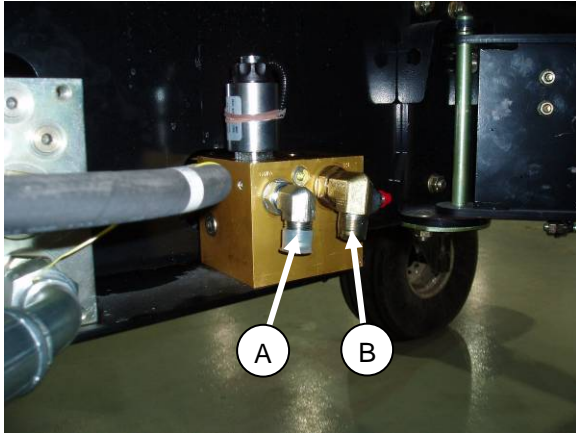
## Hydraulics installation



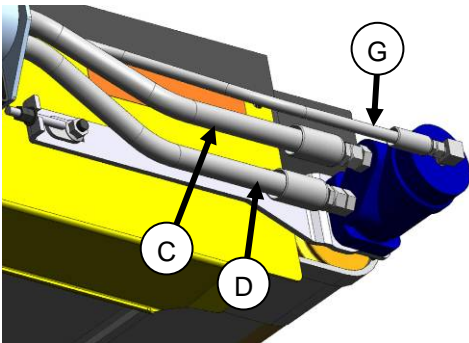
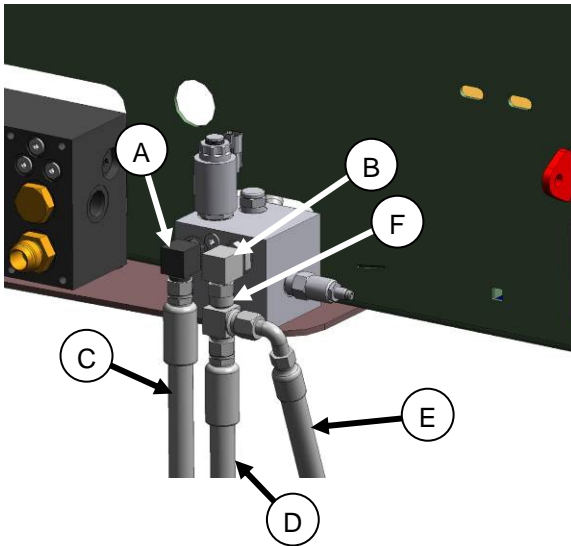
### HYDRAULICS OVERVIEW

See following pages 14 to 16 for detailed installation instructions.  
Balloons above match callouts on photos on pages 14 to 16.  
See Maintenance/Service Section for Hydraulic Schematic

## SET UP INSTRUCTIONS

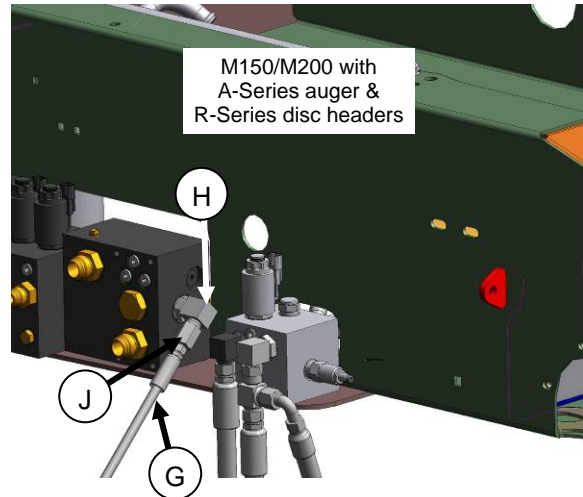


1. Install #10 ORB X #10 JIC elbow (A) in port "DWA" on draper drive block. Install #12 ORB X #10 JIC elbow (B) in port "R1".

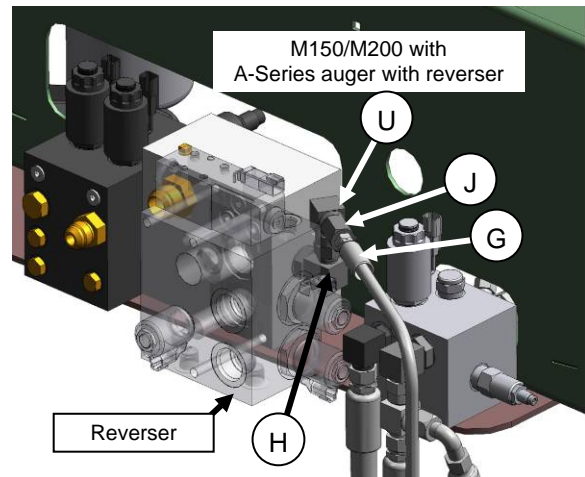


2. Install #10 tee (F) to elbow (B) as shown. Install pressure hose (C), (with blue cable tie) from top port of draper drive motor to elbow (A). Install return hose (D) to tee (F). Install 1/2 in. lift cylinder hose (E) to tee (F).

3. The installation of case drain hose (G) depends on the windrower model and the header model and configuration. See steps 4–9.

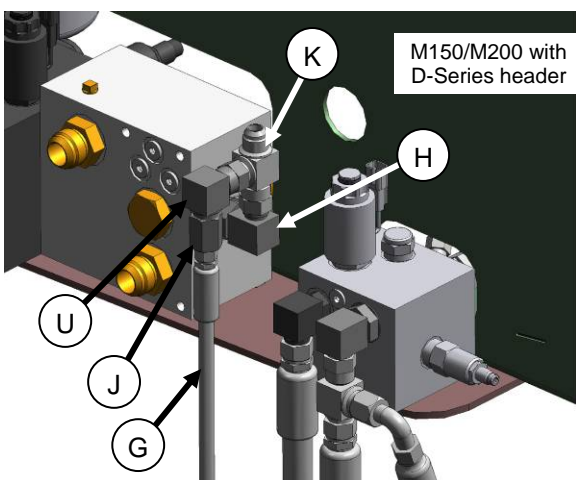


4. **On M150/M200 Windrower and A-Series auger header without reverser kit or R-Series rotary disc header**, connect case drain hose (G) to "T" port on the header drive block. First connect #12 ORB X #10 JIC elbow (H) to port "T", then install #10 JIC X #6 JIC reducer (J) to elbow (H). Finally install hose (G) to reducer (J).

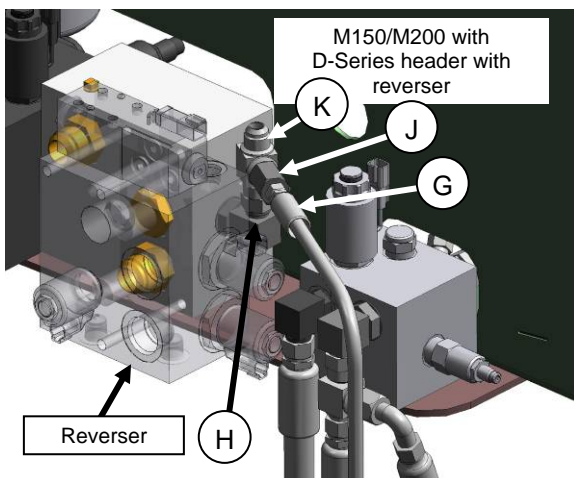


5. **On M150/M200 Windrower and A-Series auger headers with reverser kit**, connect case drain hose (G) to "T" port on the header drive block. First connect #12 ORB X #10 JIC elbow (H) to port "T", then install #10 JIC X #10 JIC elbow (U) to elbow (H) followed by #10 JIC X #6 JIC reducer (J). Finally install hose (G) to reducer (J). Make sure hose (G) is not rubbing against any fittings.

## SET UP INSTRUCTIONS



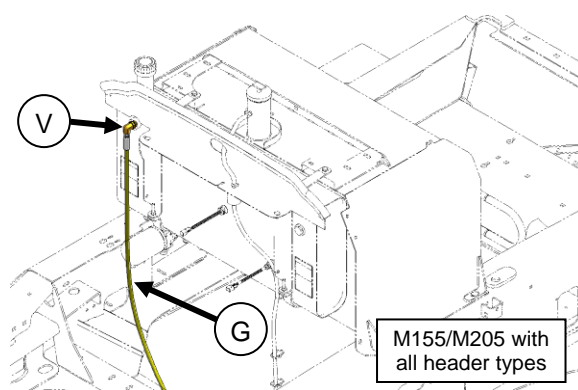
6. **On M150/M200 Windrower and D-Series draper headers without reverser kit**, connect case drain hose (G) to "T" port on the header drive block. Disconnect the reel return hose which is connected to port "T" and all the fittings in between. First connect #12 ORB X #10 JIC elbow (H) to port "T", then install #10 JIC tee (K) to elbow (H) followed by #10 JIC X #6 JIC reducer (J). Finally install hose (G) to reducer (J). Reconnect reel return hose by first installing elbow (which was removed earlier) to tee (K) followed by reel return hose.



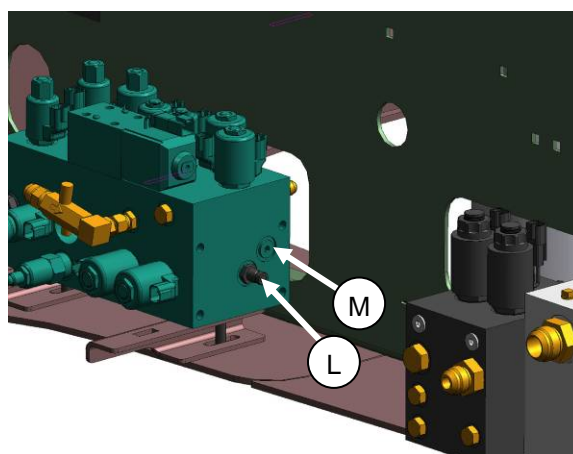
7. **On M150/M200 Windrower and D-Series draper headers with reverser kit**, connect case drain hose (G) to "T" port on the header drive block. Disconnect the reel return hose which is connected to port "T" and all the fittings in between. First connect #12 ORB X

#10 JIC elbow (H) to port "T", then install #10 JIC tee (K) to elbow (H) followed by #10 JIC X #6 JIC reducer (J). Finally install hose (G) to reducer (J). Make sure hose (G) is not rubbing against any fittings. Re-connect reel return hose by first installing elbow (which was removed earlier) to tee (K) followed by reel return hose.

8. **On M155/M205 Windrower with all header types**, connect case drain hose (G) to fitting at top left corner of hydraulic reservoir. First remove plug and connect #10 ORB X #6 JIC elbow (V) to reservoir port, then connect hose (G) to elbow (V).

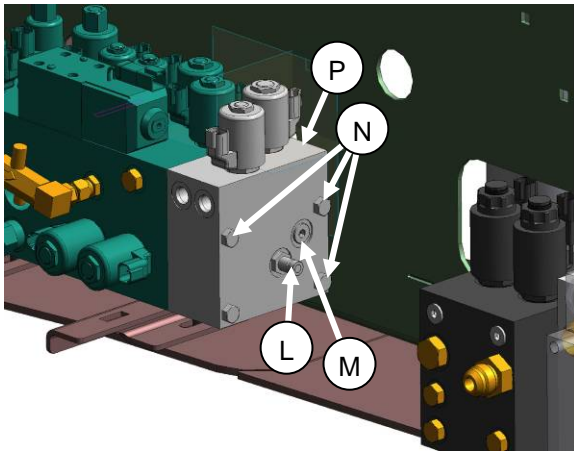


9. Remove fitting (L) and plug (M) from the lift manifold block and retain.



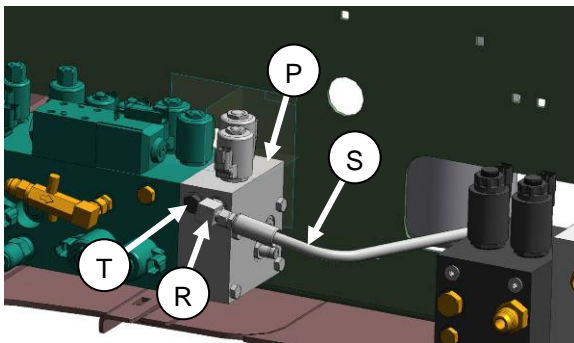


## SET UP INSTRUCTIONS



**NOTE:** Pre-install four bolts (N) and fitting (L) on auxiliary valve block to simplify assembly.

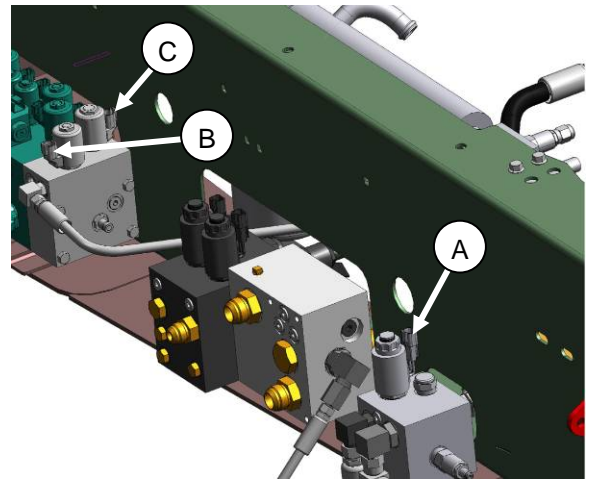
10. Install auxiliary valve block (P) to the lift manifold block. If installing with a D60 header with reel fore/aft, it will already have an auxiliary valve block. The new block (P) gets mounted next to the existing one. Apply grease to o-rings supplied with valve block and install them in the countersunk port holes where the plugs were removed. Assemble smooth side of valve (P) to lift valve with four 3/8 in. bolts (N) provided. Use the longer bolts if there are two auxiliary valve blocks. Torque bolts to 25 ft-lbf. Replace plug (M) (removed in Step 9) into auxiliary valve block. If plug (M) is damaged on removal, an extra plug is provided in kit.



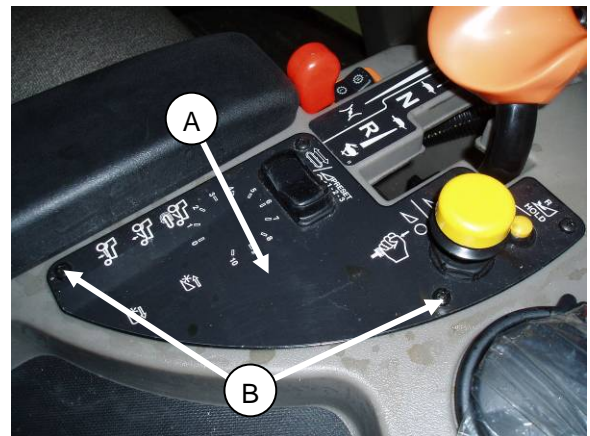
11. Install #6 ORB X #6 JIC elbow (R) in to port "K" on valve block (P). Route 1/4 in. lift cylinder hose (S) through side of windrower frame and connect to elbow (R). Install plug (T) into port "J".
12. Route the hoses neatly using the cable ties that are included in the kit. Make sure hoses are not rubbing against any moving parts.

## Electrical Installation

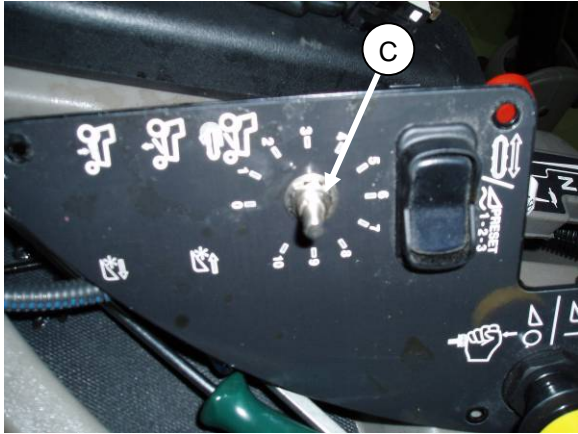
To install the DWA's electrical system, follow these steps:



1. Connect DWA harness from linkage to plug (A) on the draper drive block. Connect the other plug on DWA harness to P74 on the windrower harness, located near the valve block.  
**NOTE:** On some 2012 and earlier M205 windrower, the P74 branch of the windrower harness will not be long enough to connect to the DWA harness. If so, use harness extension provided in DWA hydraulic kit.
2. Find plug P73 on the windrower harness and connect to plug (B) on the lift block. This is valve "4C". Find plug P72 and connect it to plug (C), this is valve "2C".
3. Remove cover (A) from console inside windrower cab, by removing five screws (B).



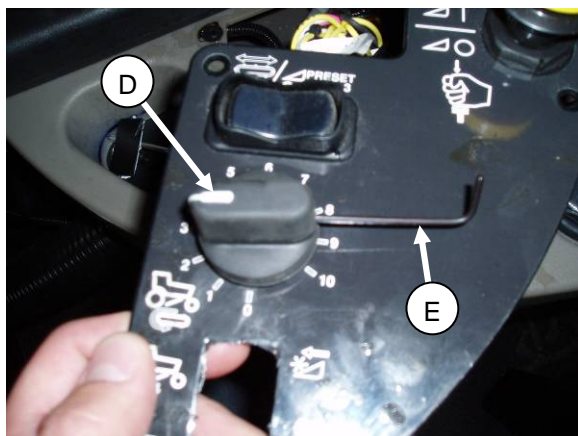
## SET UP INSTRUCTIONS



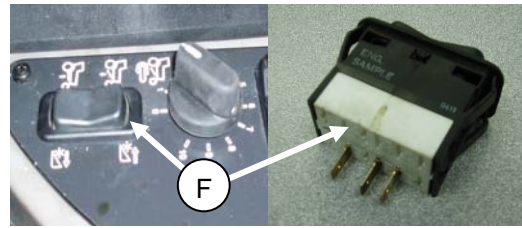
4. Cut hole in decal and install ROTARY switch (C) as shown. The hole is already present in the mounting plate.



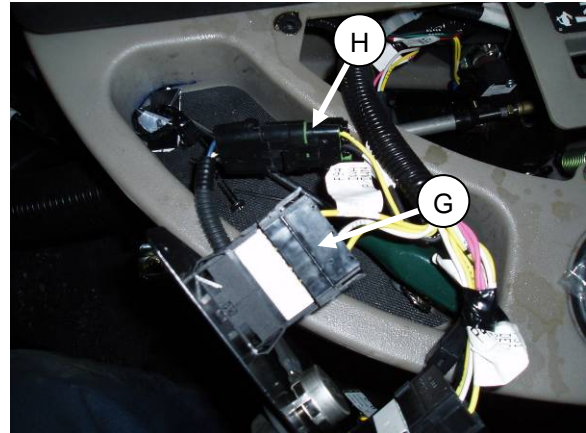
5. Remove knockout in cover (A) for ROCKER switch. File down the burrs.



6. Install knob (D) on ROTARY switch (C). Tighten set screw in knob with Allen wrench (E). (Knob not exactly as shown.)

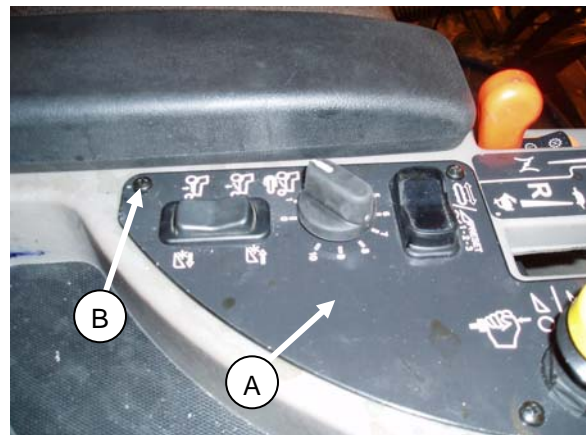


7. Install ROCKER switch (F) in cover. The side with the prongs should be next to the Operator's seat.



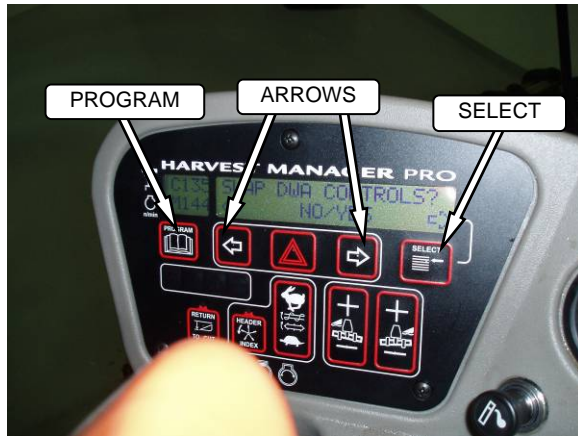
8. Install ROCKER switch into plug (G) and install ROTARY switch into plug (H). These plugs come with the windrower and are inside the console.

9. Re-install cover (A) with five screws (B).





## SET UP INSTRUCTIONS

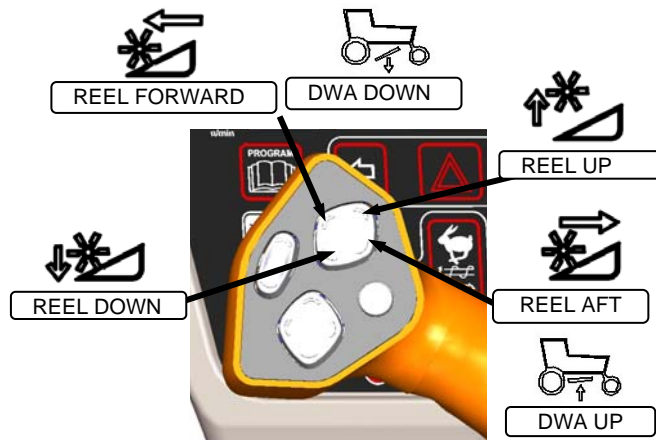


10. The program in the windrower monitor needs to be changed to recognize the DWA.

- Turn the key on. Press PROGRAM and SELECT at the same time. Select YES for windrower Setup. Toggle between YES and NO by pressing the ARROWS.
- Scroll through the menu until display reads "DWA INSTALLED?" and select YES.
- Display will then read "SWAP DWA CONTROLS?"

Choose 1 of the following 2 options:

- If you want to use the REEL FORE/AFT switch to raise and lower the DWA, select YES. The display will then read "DWA AUTO RAISE?" Select YES. The REEL FORE/AFT switch will now be used to raise and lower the DWA and the ROCKER switch (F) installed earlier will be used to control reel fore/aft (D60 headers only).



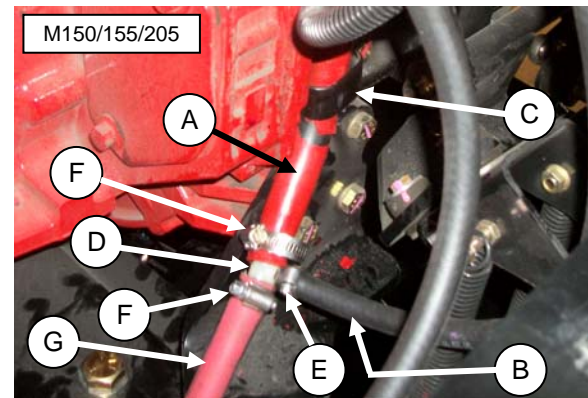
- If you want to use the ROCKER switch (F) to raise and lower the DWA, select NO. The ROCKER switch will be used to raise and lower the DWA and the REEL FORE/AFT switch will continue to be used to control the reel fore/aft.

- The display will then read "EXIT DWA MENU?" Select YES. Press PROGRAM to revert monitor back to operating mode.

### Tank overflow hose extension installation

The extension hose prevents overflow fluid dropping onto DWA draper deck.

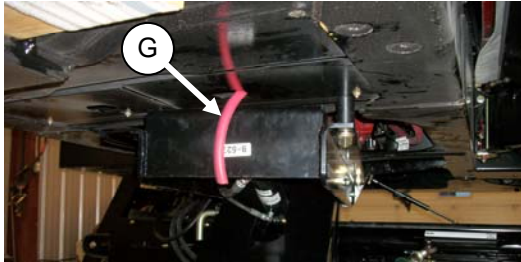
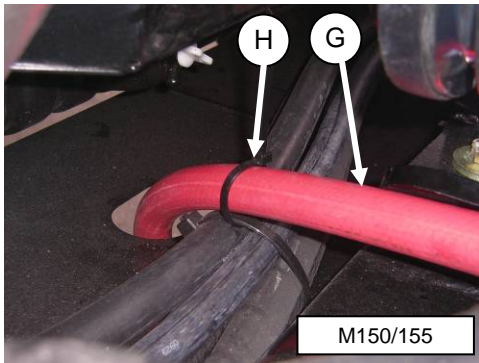
To install the tank overflow hose extension, follow these steps:



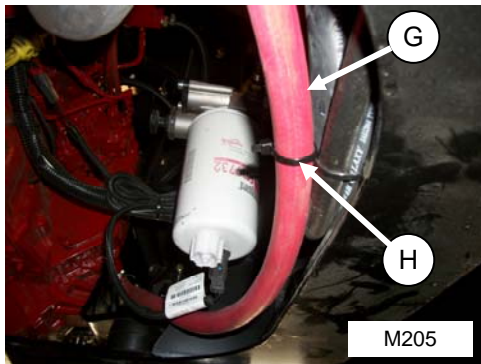
- M150/M155/M205 (Models with Cummins Engine):**
  - Locate the hydraulic and fuel tank overflow hoses (A and B respectively).
  - Pull fuel tank hose (B) out from clamp (C).
  - Use plastic tee fitting (D) from kit to join hydraulic and fuel overflow lines. Hose (B) connects to 3/8 in. tee branch with smaller gear clamp (E). Hose (A) connects to 5/8 in. tee branch with larger gear clamp (F).
  - Attach extension hose (G) from kit to tee fitting (D) using another larger gear clamp (F).



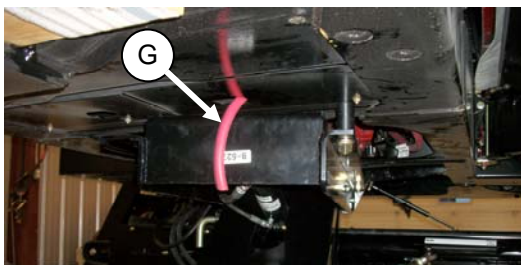
## SET UP INSTRUCTIONS



- e. **M150/M155:** Route hose (G) through slot in frame member and secure with cable tie (H) provided as shown above.



- f. **M205:** Route extension hose (G) along side of windrower frame and secure to existing hoses with cable tie (H) provided as shown above.

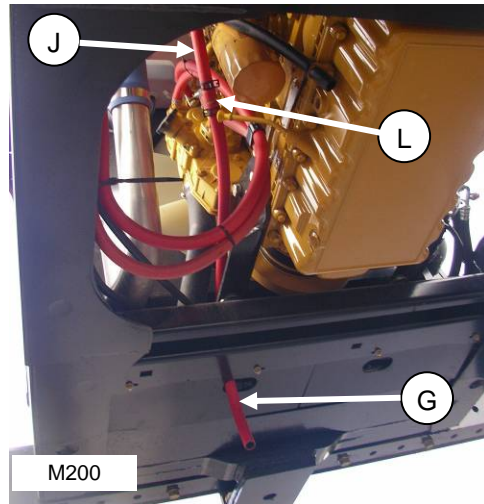


- g. **M150/M155/M205:** Trim hose (G) to length as follows:

**Disc Headers:** Leave approximately 7 in. (180 mm) free hose below windrower frame.

**Auger/Draper Headers:** Leave approximately 14 in. (360 mm) free hose below windrower frame.

### 2. **M200 Only (Cat Engine) :**



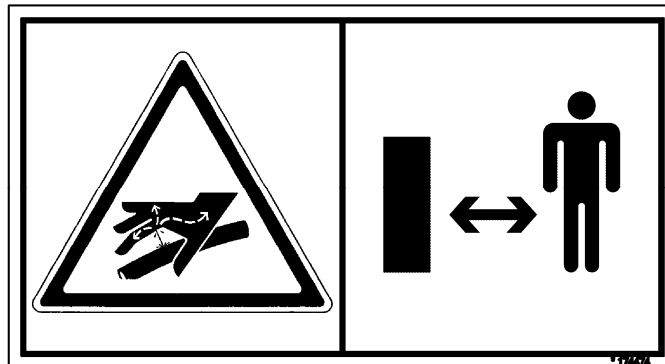
- Locate the hydraulic and fuel tank breather hose (J).
- Connect extension hose (G) from kit to existing hose (H) using straight plastic joiner and two hose clamps at (L) as shown.
- Trim hose (G) to proper length as shown in step 1 g. above.

## OPERATION

### Safety signs



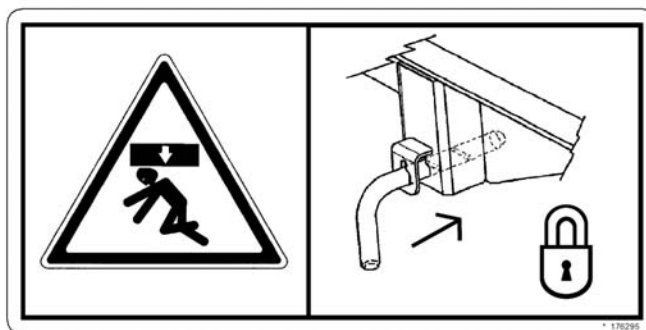
PART NO. 174683  
PINCH POINT- MOVING PARTS  
STAND CLEAR  
LOCATED ON LINKAGE ARM (BOTH  
SIDES)



PART NO. 174474  
HIGH PRESSURE HYDRAULICS  
LOCATED ON DECK

#### DO NOT GO NEAR LEAKS

- High pressure oil easily punctures skin causing serious injury, gangrene or death.
- If injured, seek emergency medical help. Immediate surgery is required to remove oil.
- Do not use finger or skin to check for leaks.
- Lower load or relieve hydraulic pressure before loosening fittings.



PART NO. 176295  
DECK LIFT LOCK  
LOCATED ON DECK LINKAGE

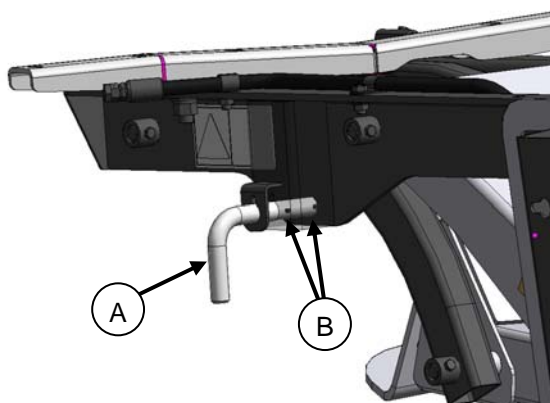
## OPERATION



### CAUTION

To avoid bodily injury:

- Review the safety sections of your windrower and header Operator's manuals.
- Keep all shields in place.
- Engage safety pin (A) when deck is raised fully for transport, service and storage or before going under deck for any reason. To engage safety pin, raise deck, rotate pin and push in until both roll pins (B) are inside channel.

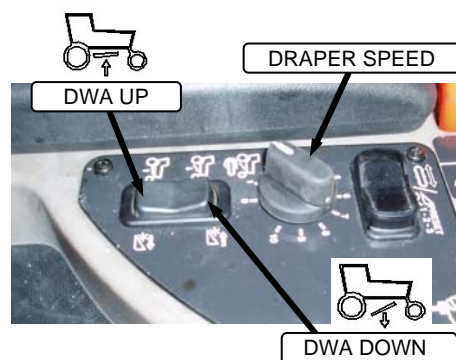


- Keep away from moving draper and rollers.
- Keep clear of the deck while it is being raised or lowered.

### To raise and lower deck

**NOTE:** Extra caution should be taken when raising the deck for the first time. The deck rotates as it raises and lowers and the backsheet folds on to the deck. Make sure the deck and backsheet are not interfering with any windrower parts or the forming shield.

In the setup instructions, if you chose to swap the DWA controls, use the REEL FORE/AFT switch to raise and lower the deck. The deck moves forward when lowering, so switch operation will be the same as when moving the reel forward. The deck moves rearward when raising so switch operation will be the same as when moving the reel rearward.



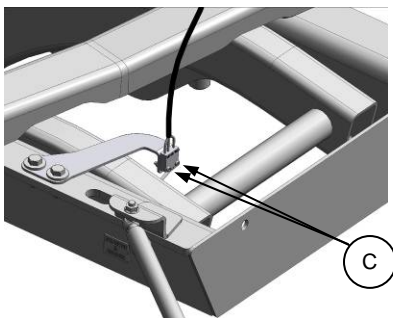
### DECK LIFT CONTROLS

In the setup instructions, if you chose "NO" to swap the DWA controls, use the ROCKER switch installed in the console. Press the ROCKER switch forward portion to lower the DWA and press the ROCKER switch rearward portion to raise the DWA.

**NOTE:** Draper shuts off automatically when deck is raised about two thirds of the way up. If deck does not shut off soon enough, resulting in backsheet touching draper before it shuts off, the switch at the linkage needs to be lowered. Lower switch by loosening two screws (C). Do not over tighten the screws or the switch will not work.

## OPERATION

### Side delivery draper speed

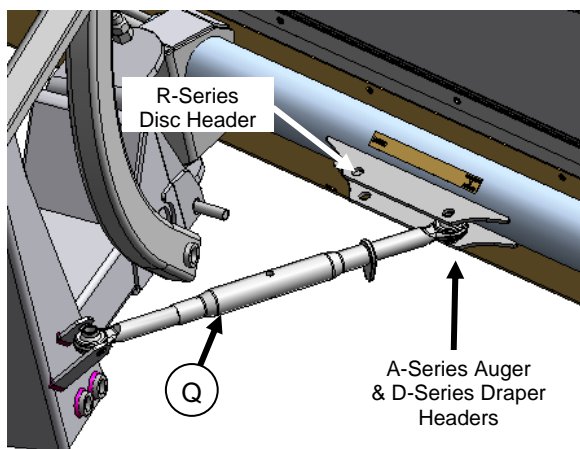
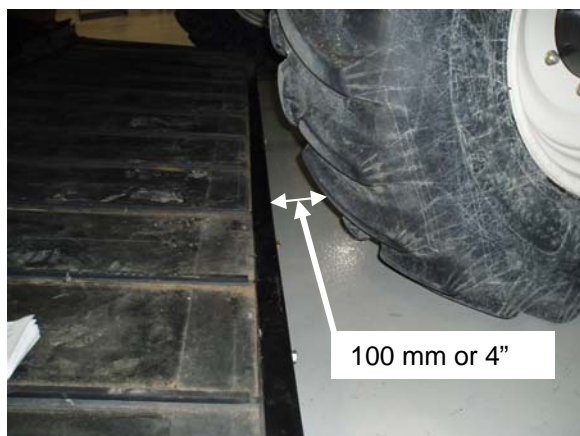


DRAPER SHUT-OFF SWITCH

To set the draper speed, turn the draper speed control. (Knob not exactly as shown.)

### To adjust deck angle

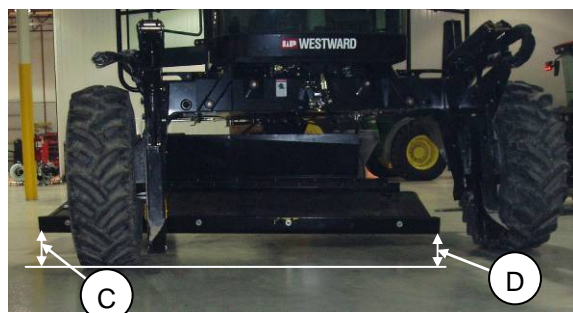
The deck angle relative to the right hand drive tire is adjustable with turnbuckle (Q). A distance of 4 in. (100 mm) from the deck to the tire is recommended. To adjust the turnbuckle, loosen the locking tab and rotate center tube to desired length then relock tab against tube.



DECK ANGLE TO TIRE

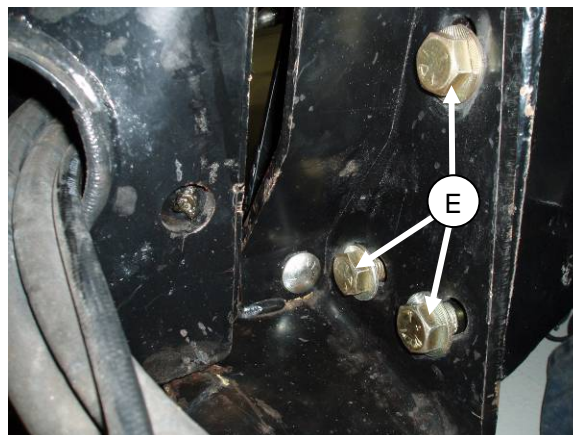
**NOTE:** If setup with an R80 header, the deck will only be in its most forward position when the windrower is running. The lift cylinder is single acting so it is not pressurized in the down stroke when the windrower is shut off. When the windrower is running there is a supply of low pressure oil to move the deck forward.

The deck angle relative to the ground should be horizontal or at a slight incline. Distance (C) should be equal to or greater than (D). If used with an R80 header in lighter crop, distance (C) should be equal to (D). If the crop needs to be thrown farther, increase distances (C).



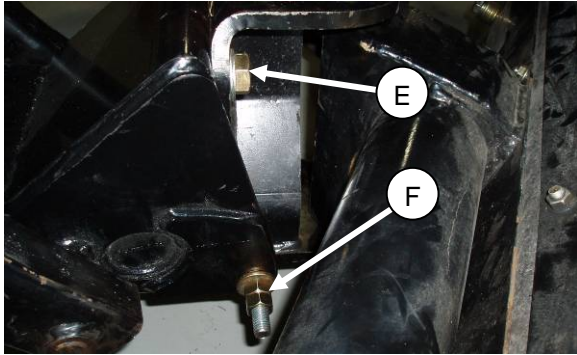
DECK ANGLE TO GROUND

To adjust the deck angle, loosen four 3/4 in. bolts (E), and then loosen nut (F). Adjust draw bolt by tightening the second nut (F) if you want to increase distance (C), and loosen nut if you want to decrease distance (C). Once done adjusting, tighten nut (F), and then tighten four bolts (E). The four 3/4 in. bolts must be torqued to 245 ft-lbf.





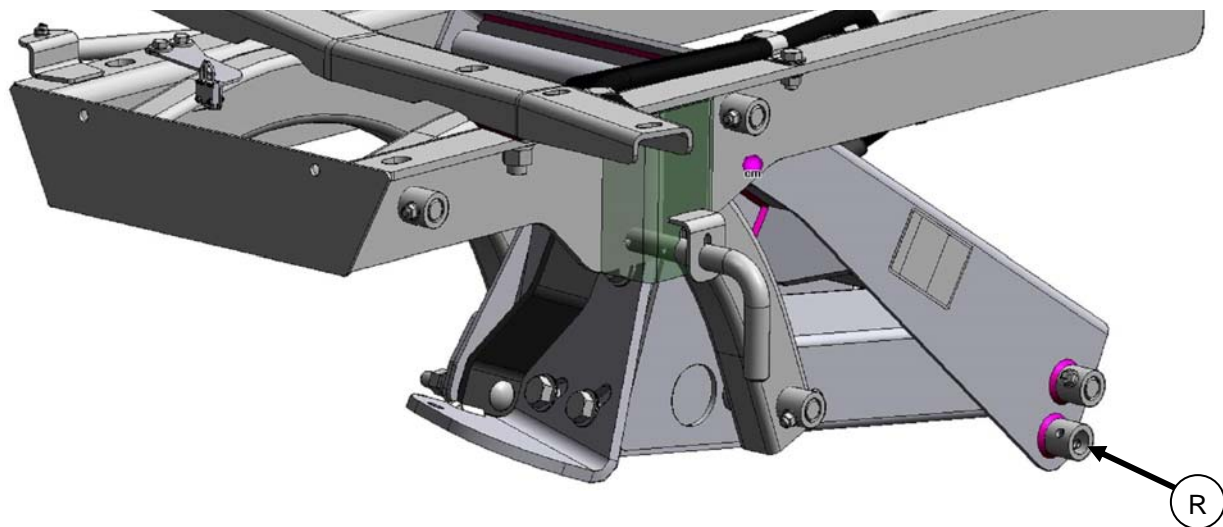
## OPERATION



### To adjust deck height

The deck should never touch the ground or excessive wear could occur to some deck components. If the deck is too low to the ground, raise it as follows:

- Lower linkage by fully extending cylinder.
- Move bottom pivot pin to lower position (R).
- This will raise the front of the deck approximately 4 in. (100 mm).



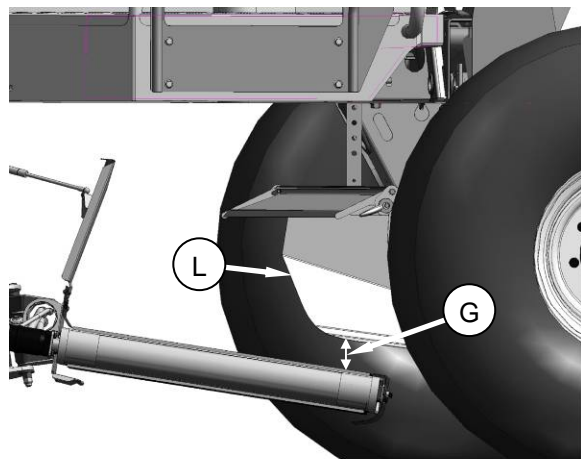
### Draper tracking

Draper tracking needs to be checked when the draper is first run-up otherwise damage to the draper can occur. See Draper Adjustment in the Maintenance/Service section on how to adjust the tracking.

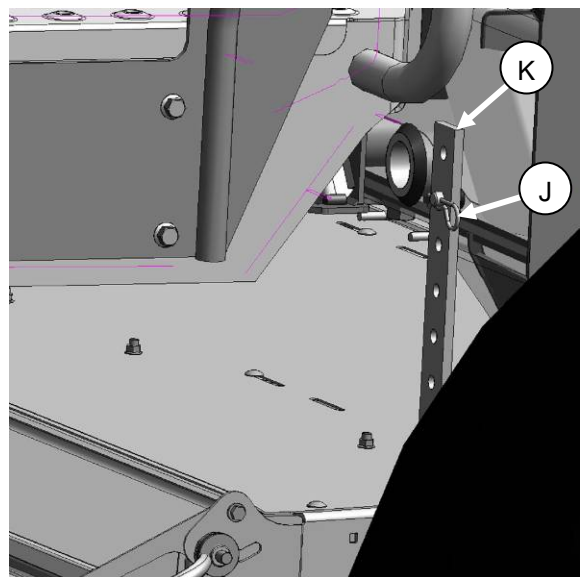
## OPERATION

### Conditioner forming shield position

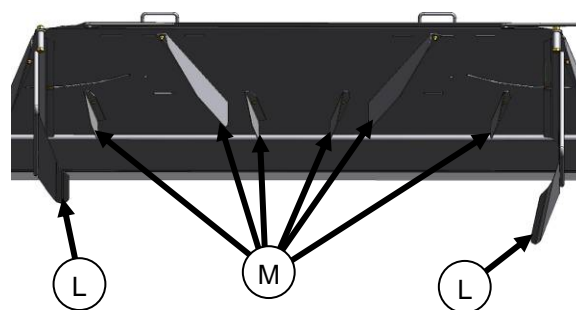
Make sure forming shield is high enough to clear the deck when it is lowered (G). Adjust the forming shield height by removing hair pin (J) and moving strap (K) to desired position. The forming shield should be as low as possible without interfering with deck.



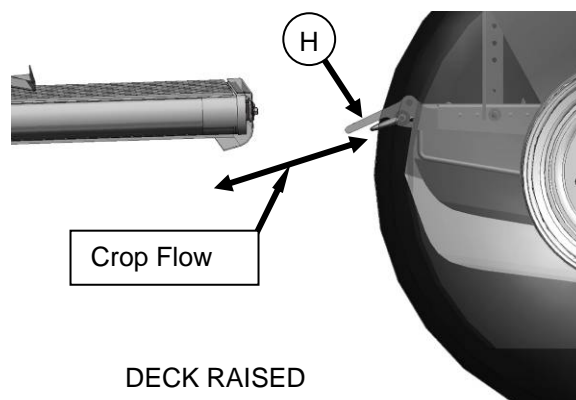
DECK LOWERED



The left hand side deflector (L) should be in the widest position to not affect crop flow. If center delivering, the left hand deflector can be moved in to make a narrower windrow. The right hand side deflector should be in the widest position to not affect the crop flow because this is where the deck is the furthest from the conditioner rolls.



Adjust rear deflector baffle (H) so the crop flow does not interfere with the deck when it is fully raised.



DECK RAISED

Fins (M) underneath the forming shield can affect the crop flow. It is recommended to remove fins, especially with an R80 in light crop.

### Conditioner rolls position

The gap between the conditioner rolls needs to be small enough to properly throw the crop on to the double windrow attachment. The gap is dependent on crop type and yield. If the gap is too little for heavy crops, this consumes excessive engine power and is hard on all the components affected. If the gap is too large, the crop will not have enough velocity to reach the side delivery deck. See conditioner Operator's manual for adjustment procedure.



## OPERATION

### Operating recommendations

**15, 16, 18, and 20 ft. Headers:** On the first pass, the side delivery system is raised and crop is deposited between windrower wheels. On the return pass, the side delivery system is lowered and crop is deposited outside of the windrower wheels to the right, beside the previously laid windrow. Position of the crop can be adjusted by using the side deflectors on the forming shields when depositing the crop in the center and by varying the draper speed when depositing the crop to the side. The faster the draper speed is set, the farther the crop will be delivered to the side.

**25 and 30 ft. Headers:** The side delivery system is lowered at all times. Crop is deposited outside the windrower wheels and laid beside the previously deposited windrow on return pass. Position of the crop can be adjusted by varying the draper speed when depositing the crop to the side. One can also raise the side delivery system and center deliver all the time.

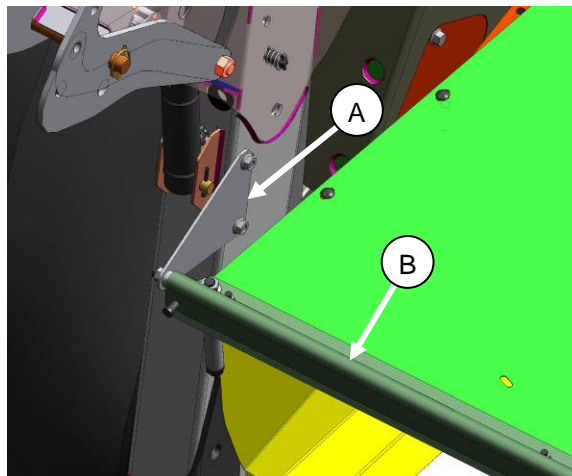
### Operating recommendations with R80 Rotary Disc Header:

The conditioner rolls on an R80 Rotary Disc Header are further ahead than all other headers; therefore delivering light crop from the conditioner rolls to the side delivery deck may require special attention:

There are three areas that can affect the crop flow to the deck:

1. Crop flow from the cutterbar to the rolls.
  - a. Header cut width must be kept as full as possible on the right hand side. Any less than 75% may have adverse effects on feeding.
  - b. Feed plates must be installed for appropriate crop. They are required for forage but not for alfalfa. (See R80 Operator's Manual.)
  - c. Higher ground speeds will usually result in better crop flow from the conditioner rolls to the deck. Ground speed should be a minimum of 6 mph (10 km/h) for light crops.
  - d. Disc speed must be in recommended range for specific crop/yield. (See R80 Operator's Manual.)
2. Crop flow from rolls to forming shield.

- a. Rear baffle on the R80 header should be in the upmost position. However it may need to be lower for center windrowing.
- b. If there are fins on the rear baffle, remove them to prevent interference with the crop flow.
- c. Header angle: The steeper the header angle, the higher the arc of the crop trajectory will be. Header angle should be set such that the crop is projected at a maximum arc height without excessive contact with the top forming shield. It may be possible to shoot crop above the forming shield with extreme header angle and rear baffle positions. In rocky conditions where DWA is necessary, a high skid shoe kit or adjustment to gauge rollers may be required to achieve correct stubble height and also maintain crop trajectory.
- d. Header height: affects the header angle. Target should be to have the lift linkage fully down at all times.
- e. The roll gap should be small enough to properly grab the crop and throw it.
- f. The roll speed which is mechanically tied to the disc speed can affect how fast the crop gets projected. This again should be in the recommended range.



3. Forming shield settings:
  - a. Make sure forming shield (B) is installed correctly with bracket (A).
  - b. Buildup of sticky crop residue on deflector sliding surfaces should be periodically removed.
  - c. See "Conditioner Forming Shield Position" on previous page.

# MAINTENANCE/SERVICE

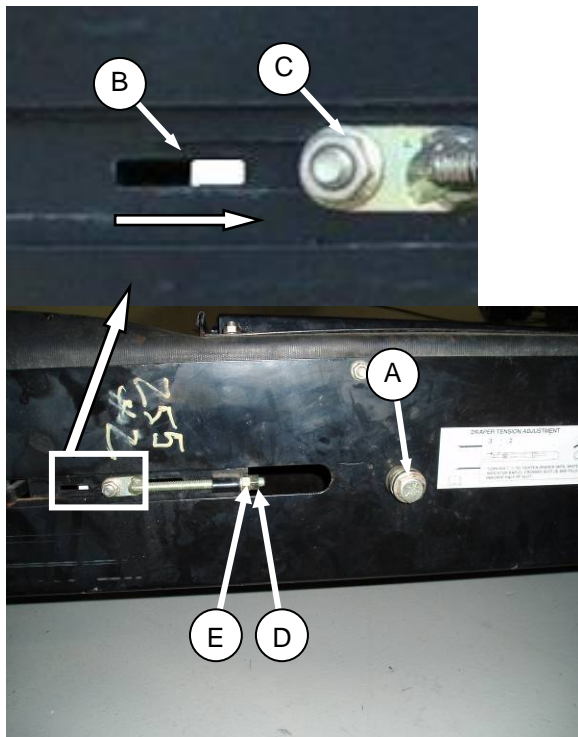
## Draper Tension Adjustment

Draper tension should be just enough to prevent slipping and keep draper from sagging.

Set draper tension as follows:

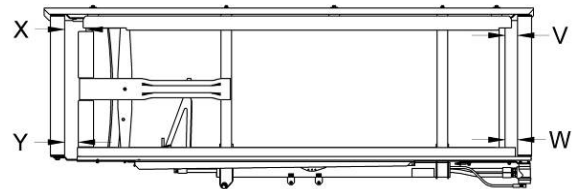
1. Check that draper guide (rubber track on under- side of draper) is properly engaged in groove of drive roller and that idler roller is between the guides.
2. Turn bolt (A) clockwise (tighten) and white indicator bar (B) will move to the right in direction of arrow to indicate that draper is tightening. Tighten until bar is about halfway in window.

**IMPORTANT:** To avoid premature failure of draper, draper rollers and/or tightened components, do not operate with tension set so that white bar is not visible.



## Draper Tracking Adjustment

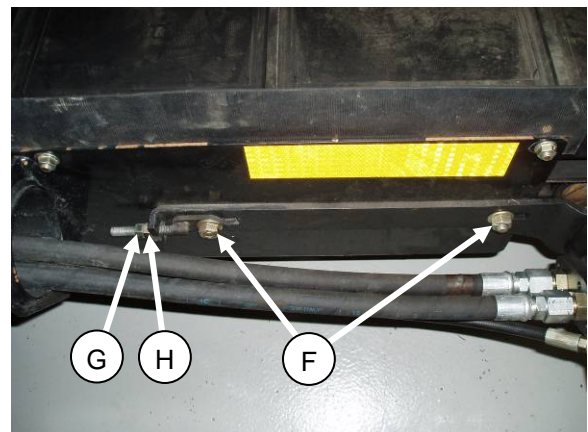
The draper deck has one fixed roller and one spring-loaded roller. The spring loaded roller is located at the same end of the deck as the draper tensioner. Both rollers can be aligned by adjuster rods.



If the draper is tracking incorrectly, make the following adjustments to the rollers:

TRACKING	AT LOCATION	ADJUSTMENT	METHOD
Rearward	Drive Roller	INCREASE 'W'	Tighten Nut 'H'
Forward		DECREASE 'W'	Loosen Nut 'H'
Rearward	Idler Roller	INCREASE 'Y'	Tighten Nut 'E'
Forward		DECREASE 'Y'	Loosen Nut 'E'

1. To adjust the idler roller: Loosen nut (C) and then loosen nut (D). Adjust nut (E) according to chart and then tighten nuts (D) and (C).
2. To adjust the drive roller: Loosen two nuts (F) and then loosen nut (G). Adjust nut (H) according to chart and then tighten nuts (G) and (F).
3. After adjusting the alignment adjust the tension of the draper.



## MAINTENANCE/SERVICE



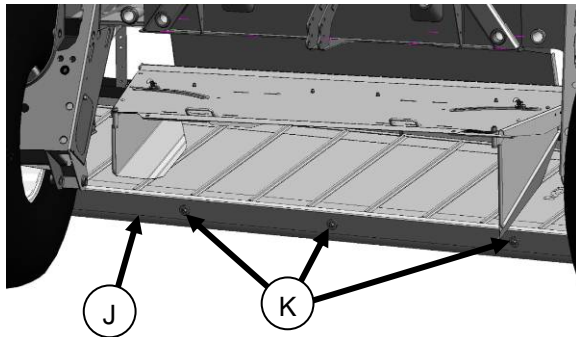
### DANGER

To avoid bodily injury or death from unexpected start-up or fall of raised machine, stop engine, remove key and engage safety pin before going under machine for any reason.

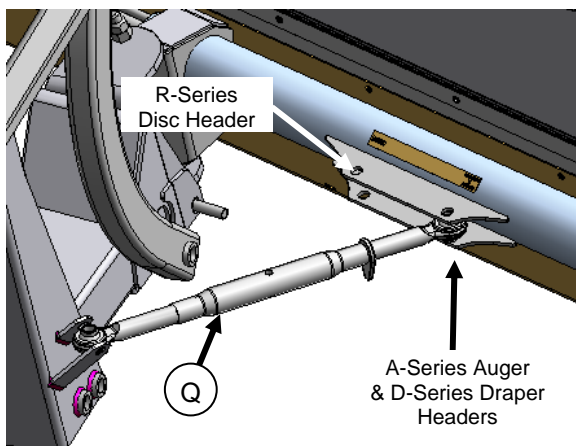
### Replacing draper

To replace the draper, follow these steps:

1. Raise deck partly up to increase space between deck and right hand drive tire. First remove front skid (J) by removing four nuts (K).



2. Loosen draper tension and push idler roller inwards as far as possible.
3. Disconnect turnbuckle (Q) and allow deck to rotate rearwards to increase space between deck and tire.

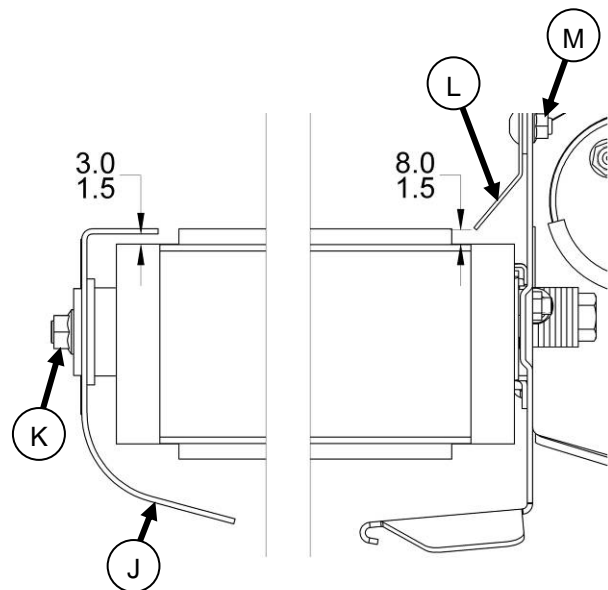


4. Pull off old draper and slide on new one. The draper is bi-directional so the orientation of the draper does not matter. Tension the draper.

5. Re-install turnbuckle (Q) and front skid (J). Adjust front skid to achieve a 1/16 to 1/8 in. (1.5 to 3.0 mm) gap to draper.
6. Run the new draper and check alignment, adjust alignment if necessary. Recheck draper tension after it has run for a few hours.

### Front skid adjustment

Adjust front skid (J) so it is just above the draper. To adjust, loosen four nuts (K) on front of skid, position skid height and retighten nuts. The skid height should be 1/16 to 1/8 in. (1.5 to 3.0 mm) above the draper. The weight of the skid should not be on the draper; otherwise it will cause excessive heat and melt the draper. If gap is excessive, crop can enter inside draper.



### Rear deflector adjustment

The rear deflector (L) prevents crop from entering inside draper. To adjust, loosen all nuts (M) along the length of the deck and raise or lower accordingly. The height should be 1/16 to 5/16 in. (1.5 to 8 mm) above the draper.

## MAINTENANCE/SERVICE

### Draper roller maintenance

The draper rollers have non-greaseable bearings. The external seal should be checked every 200 hours or more frequently in sandy conditions to obtain the maximum bearing life. Remove front skid to inspect seals.

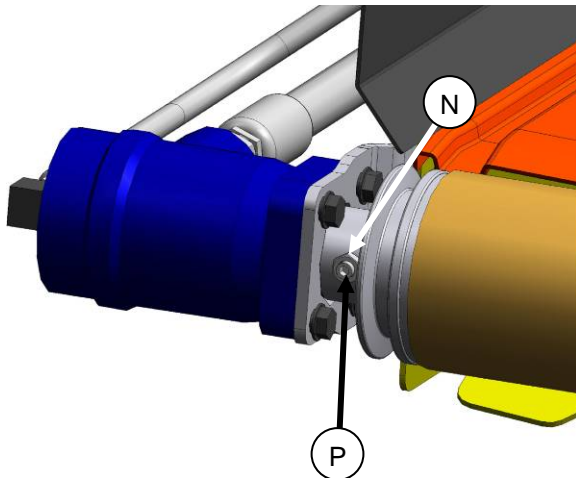


### DANGER

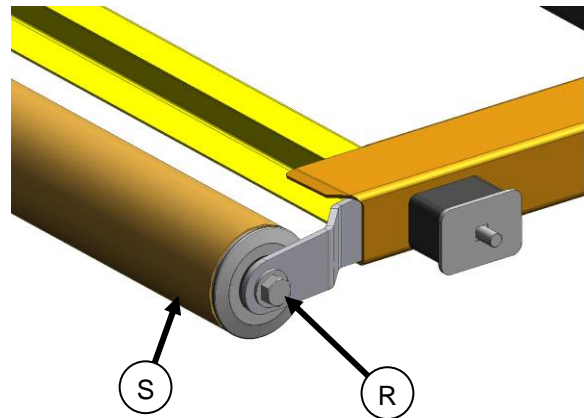
**To avoid bodily injury or death from unexpected start-up or fall of raised machine, stop engine, remove key, and engage safety pin before going under machine for any reason.**

#### Drive roller:

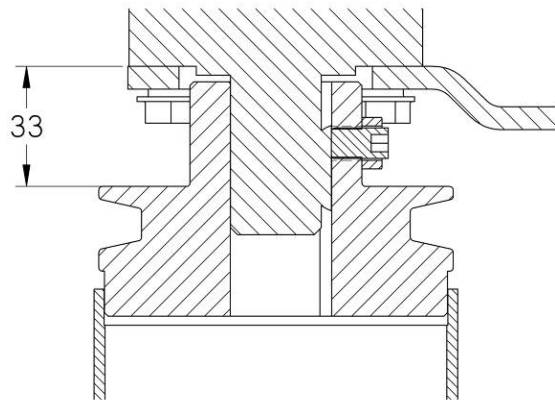
1. Raise deck and engage safety pin.
2. Remove front skid, loosen and remove draper. See page 27 for instructions.
3. Loosen two jam nuts (N) and set screws (P).



4. At the front of the drive roller (S) remove bolt and washer (R). The arm can be pulled out of the deck.



5. Slide the drive roller off the motor shaft.
6. If you need to repair the bearing or seal, see *Draper roller bearing/seal replacement on page 29*.
7. Re-install drive roller in reverse order.  
**NOTE:** Apply grease to motor shaft before reassembling.
8. Slide drive roller on to motor shaft. Make sure it is fully engaged. The drive roller should be 1-1/3 in. (33 mm) from the face of the motor.



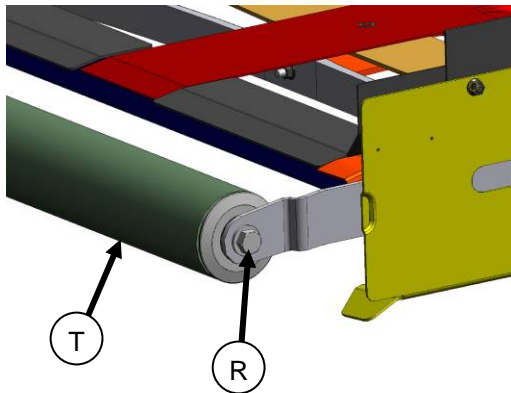
9. Install two set screws (P) with jam nuts. Torque set screws to 20 ft-lbf (27 N-m).
10. Torque bolt (R) to 70 ft-lbf (95 N-m).



## MAINTENANCE/SERVICE

### Idler roller:

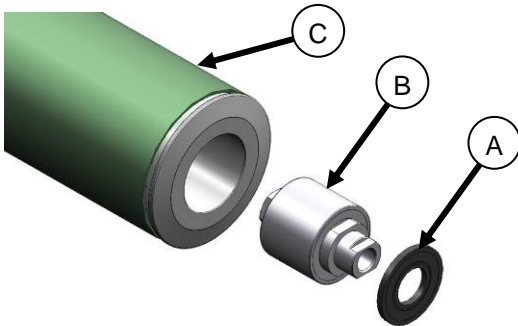
1. Raise deck and engage safety pin.
2. Remove front skid. Loosen draper. Draper does not need to be removed but removal will ease roller disassembly.
3. Remove idler roller (T) by removing bolt and washer (R) at each end of roller.



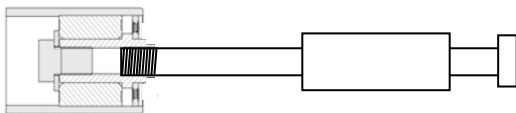
4. Re-install idler roller in reverse order.
5. Torque bolts (R) to 70 ft-lbf (95 N-m).

### Draper roller bearing/seal replacement:

1. Remove roller assembly. See previous section for instructions.

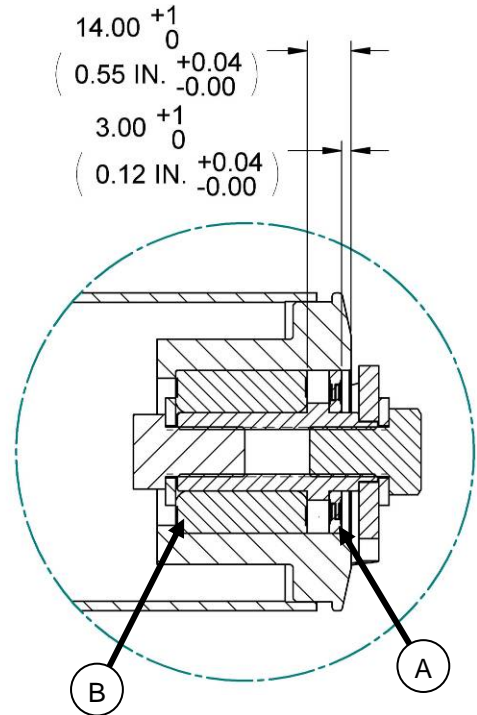


2. Remove bearing assembly (B) and seal (A) from roller tube (C) as follows:



- a. Attach a slide hammer to threaded shaft.
- b. Tap out the bearing assembly.

3. Clean inside of roller tube (C). Check tube for wear or damage. Replace if necessary.

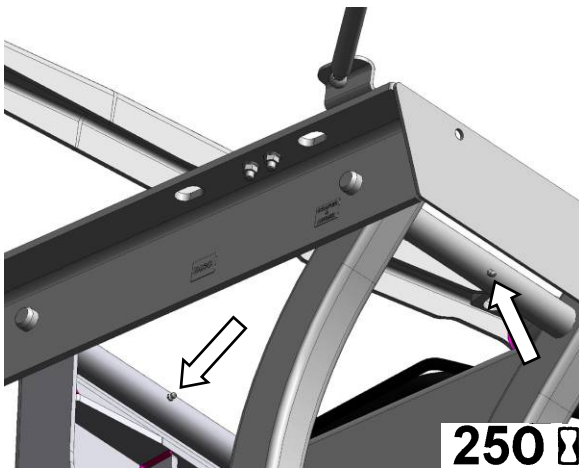
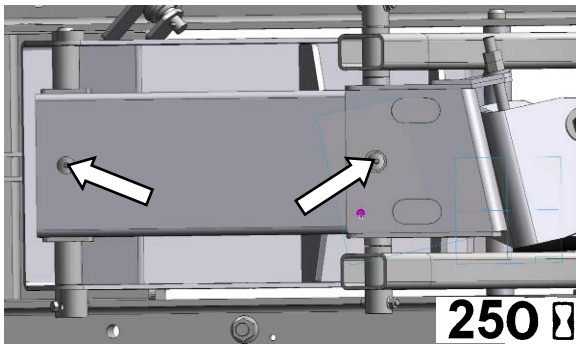
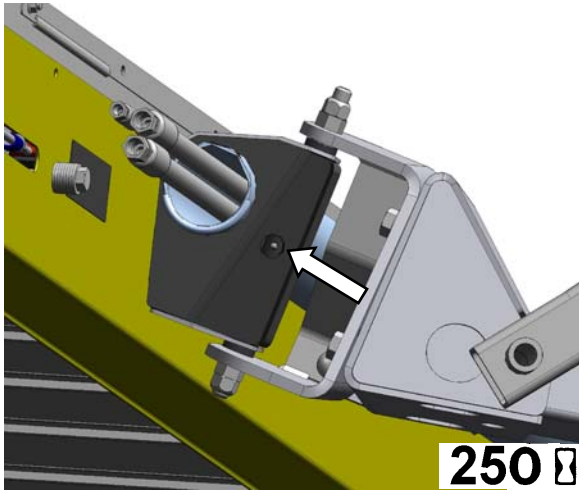


4. Install bearing assembly (B) into roller by pushing on outer race of bearing. The bearing is fully positioned when the 0.55 in. (14 mm) dimension is achieved.
5. Apply grease in front of bearing.
6. Install seal into roller by pushing on the outer and inner race of the seal. A flat washer (1.0 in. ID X 2.0 in. OD) works well to push against the seal. The seal is fully positioned when the 0.12 in. (3 mm) dimension is achieved.
7. Make sure bearing and seal turn freely. Re-install roller assembly in to deck.

## MAINTENANCE/SERVICE

### Lubrication

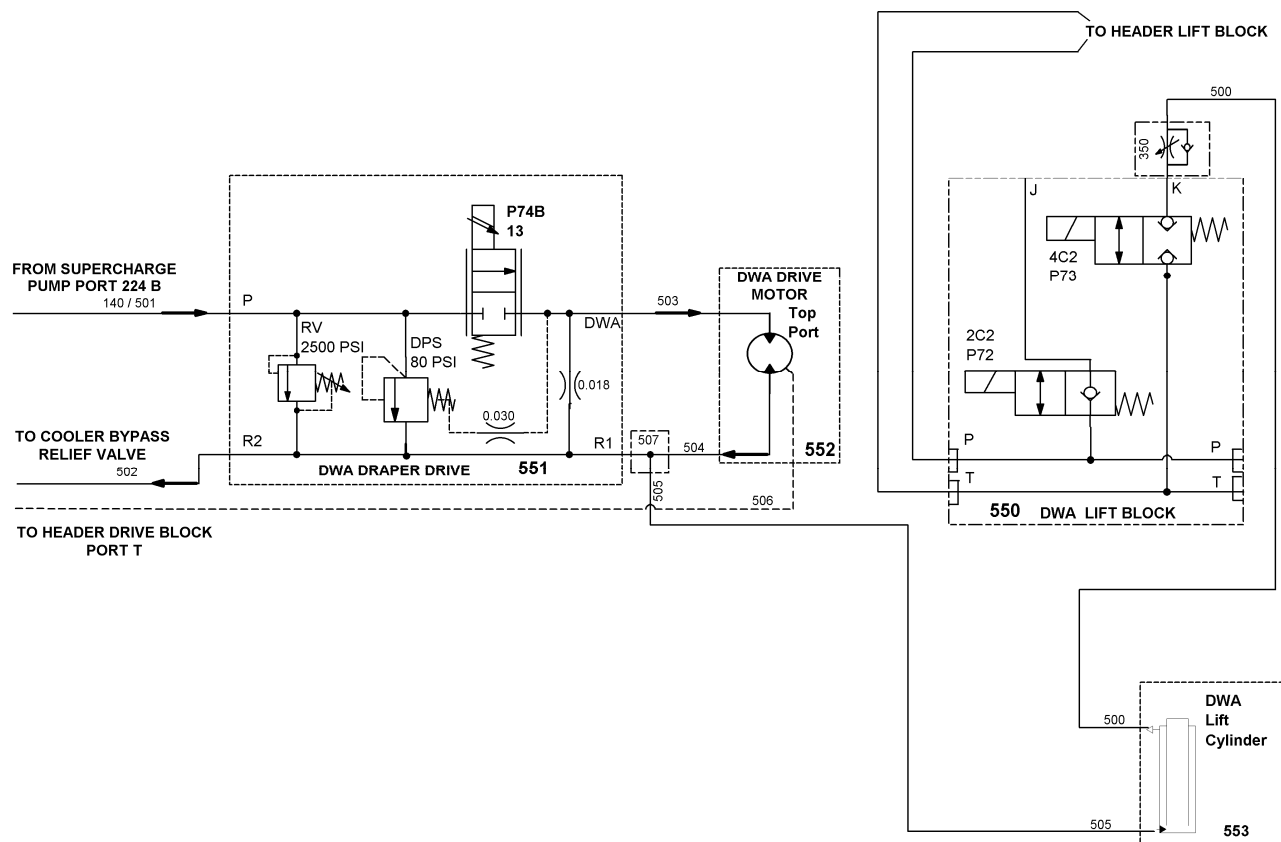
There are five pivots which require greasing every 250 hours and/or after end of season.





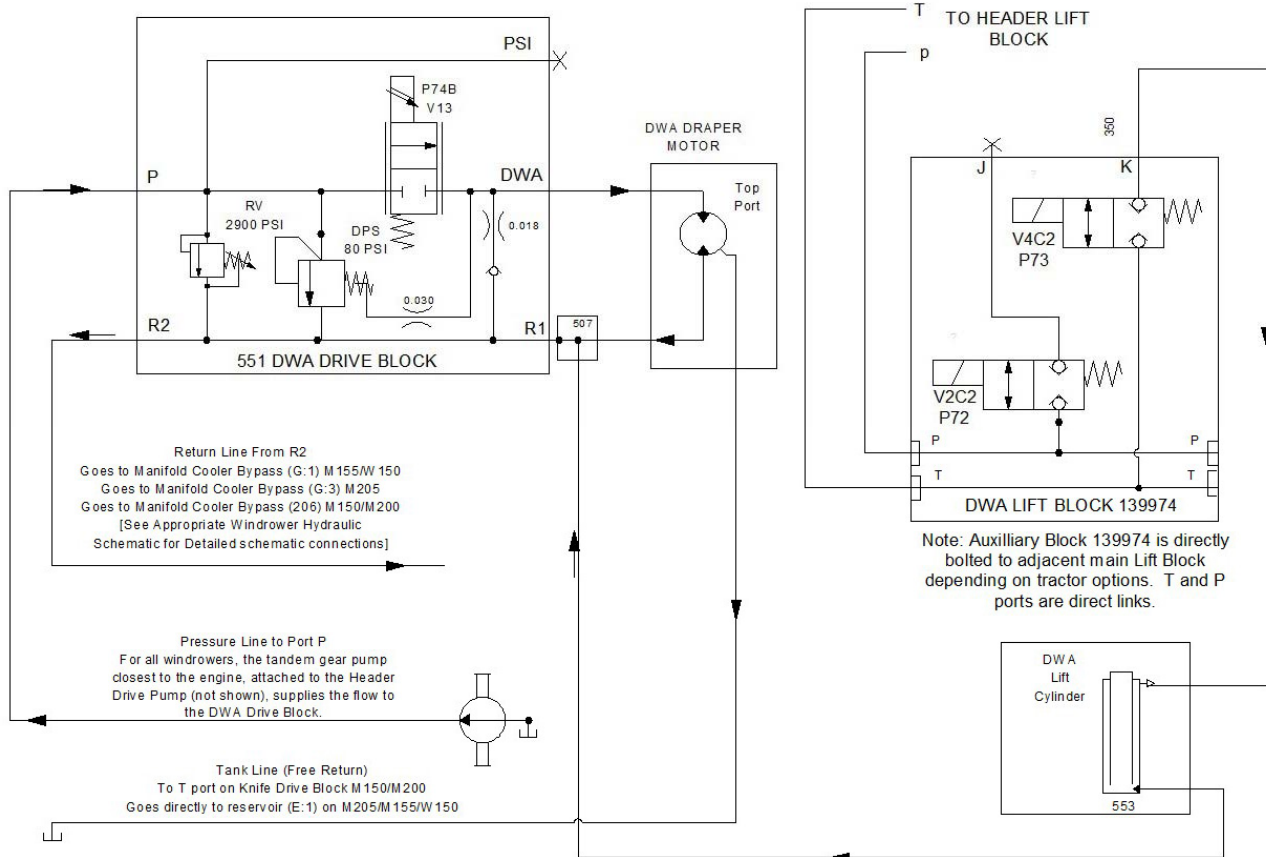
# MAINTENANCE/SERVICE

## Hydraulic schematics



HYDRAULIC SCHEMATIC WITH OLDER DWA DRIVE BLOCK WITH 2,500 PSI RELIEF VALVE  
AND OLD DWA LIFT BLOCK 110575 WITH 1 DOUBLE CHECK VALVE  
(SEE DETAILED HYDRAULIC SCHEMATICS IN WINDROWER TECHNICAL MANUAL)

## MAINTENANCE/SERVICE



HYDRAULIC SCHEMATIC WITH NEWER DWA DRIVE BLOCK WITH 2,900 PSI RELIEF VALVE  
AND NEW DWA LIFT BLOCK 139974 WITH TWO DOUBLE CHECK VALVES  
(SEE DETAILED HYDRAULIC SCHEMATICS IN WINDROWER TECHNICAL MANUAL)

## REPAIR PARTS

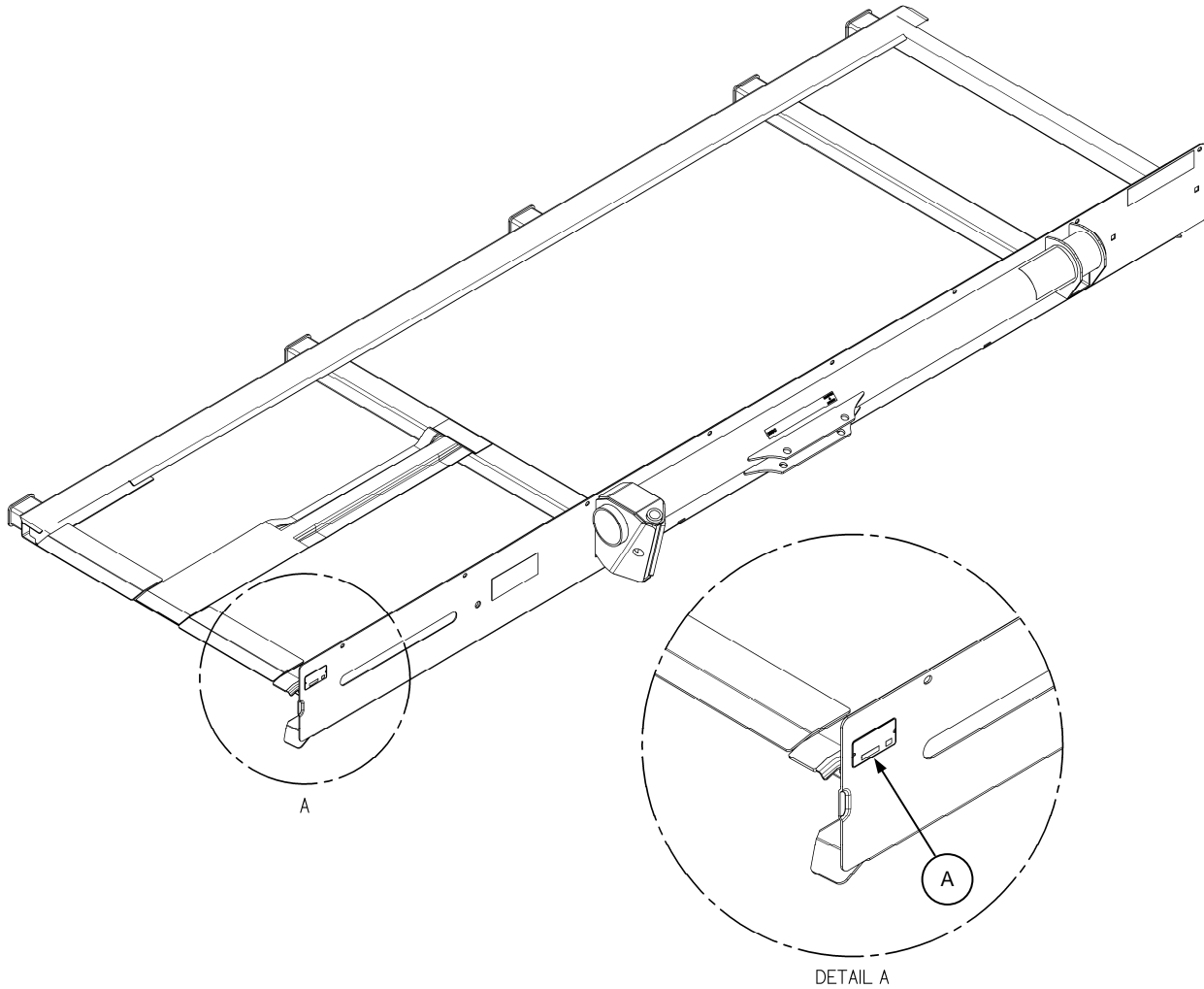
## REPAIR PARTS

### Serial Number

Record the serial number in the space provided.

\_\_\_\_\_

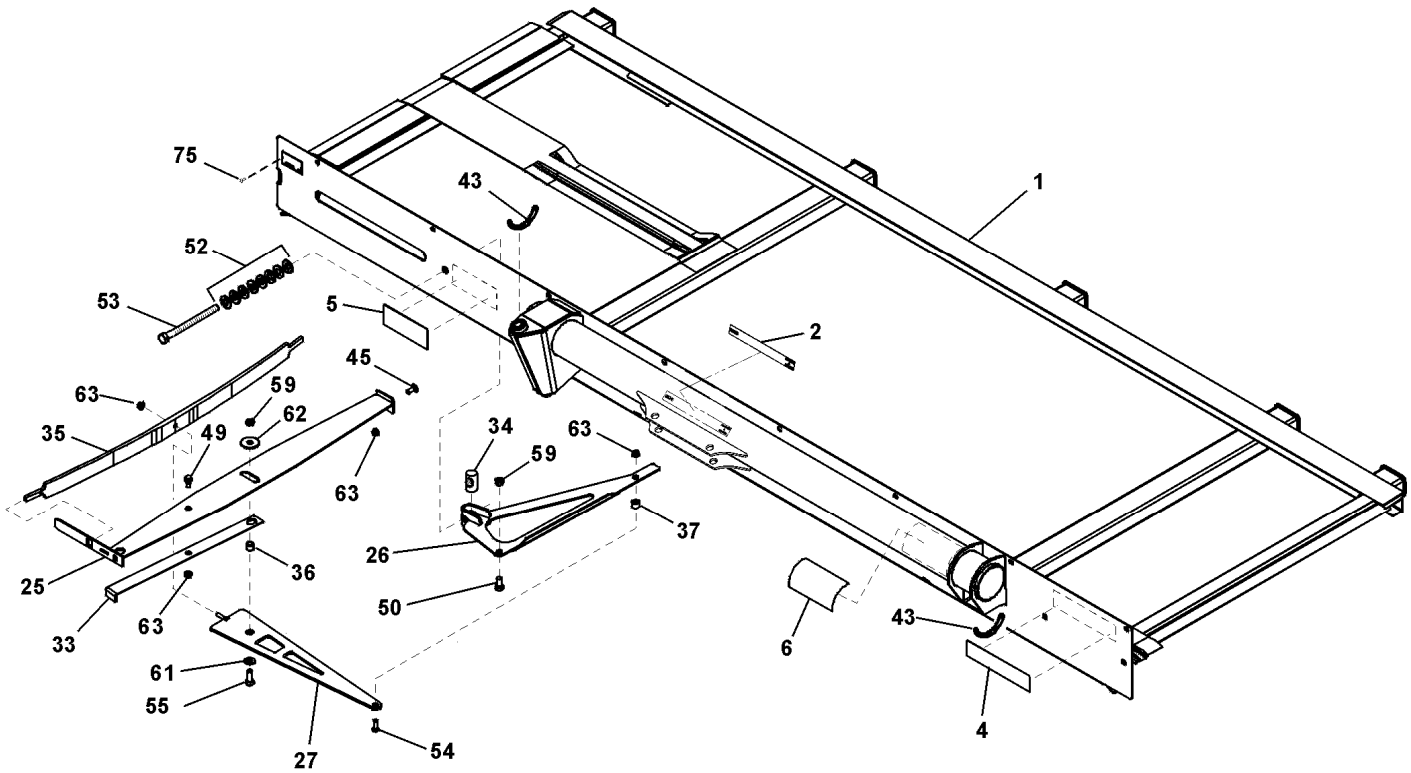
Plate is located on deck at (A).



**NOTE:** When ordering parts and service, be sure to give your Dealer the complete and proper serial number.  
**BOLDED** part numbers indicate changes or additions since last revision.

## REPAIR PARTS

### Deck, draper, and rollers (illustration 1)



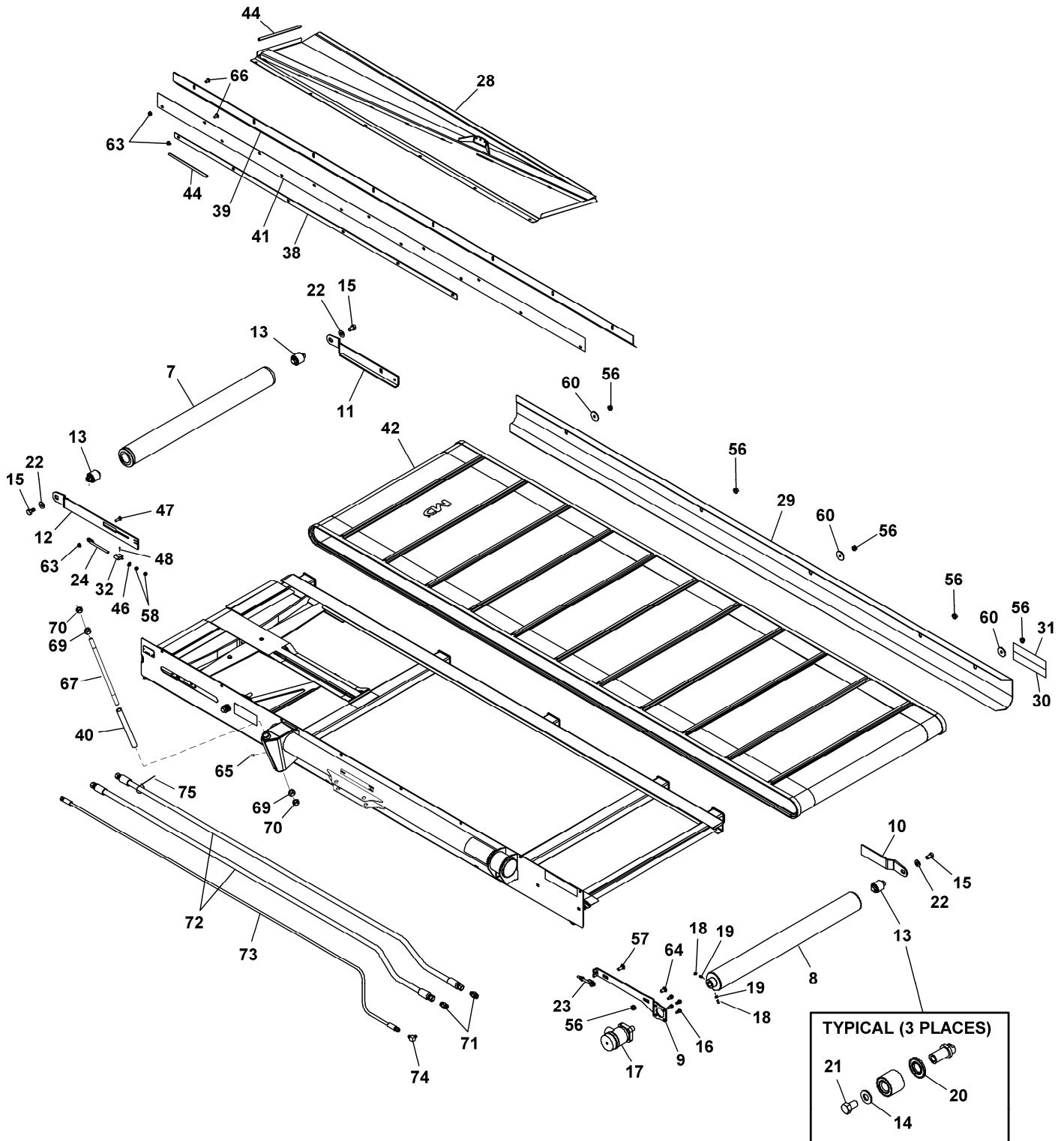


## REPAIR PARTS

REF	PART NUMBER	DESCRIPTION	QTY	SERIAL NUMBER
1	172730	DECK – complete with decals.....	1	
2	176071	DECAL – header position, horizontal format.....	1	
4	115146	REFLECTOR – amber .....	1	
5	220084	DECAL – draper tension .....	1	
6	174474	DECAL – warning, hydraulic, 2 panel .....	1	
25	120449	MEMBER – left hand stabilizer weldment.....	1	
26	120451	BELL CRANK WELDMENT – left hand .....	1	
27	120462	MEMBER – compression weldment.....	1	
33	145428	INDICATOR.....	1	
34	145361	NUT – special .....	1	
35	145548	SPRING – leaf (tensioner).....	1	
36	132531	SPACER.....	1	
37	132532	SPACER.....	1	
43	109791	MOULDING .....	2	
45	19965	BOLT – round head, square neck, 3/8 NC x 1.0 GR 5 ZP .....	1	
49	172259	BOLT – shoulder, 3/8-16 UNC .....	1	
50	21575	BOLT – hex head, 1/2 NC x 1.0 GR 5 ZP .....	1	
52	30441	WASHER – hardened .....	8	
53	135906	BOLT – hex head, 5/8 NC x 7.5 LG TFL GR 5 ZP.....	1	
54	20077	BOLT – hex head, 3/8 NC x 1.0 LG GR 5 ZP .....	1	
55	21491	BOLT – hex head, 1/2 NC x 1.25 LG GR 5 ZP .....	1	
59	137727	NUT – hex jam, distorted thread, 1/2-13 UNC GR 5 ZP .....	2	
61	18599	WASHER – SAE flat, 17/32 ID x 1 1/16 inch OD ZP .....	1	
62	42592	WASHER – flat.....	1	
63	30228	NUT – flange, distorted thread, smooth face, 3/8-16 UNC .....	4	
75	14338	RIVET – blind 1/8 x 1/8 .....	2	

# REPAIR PARTS

## Deck, draper, and rollers (illustration 2)



## REPAIR PARTS

REF	PART NUMBER	DESCRIPTION	QTY	SERIAL NUMBER
7	144833	ROLLER – idler weldment.....	1	See NOTE 1
8	144494	ROLLER – drive weldment.....	1	
9	144501	ARM – support .....	1	
10	144499	ARM – roller support .....	1	
11	176000	ARM – support weldment.....	1	
12	144837	ARM – support rear .....	1	
13	165735	PIN ASSEMBLY – draper roller .....	3	
14	30441	WASHER – hardened .....	3	
15	145249	BOLT – hex head, 5/8 NF x 1.0 LG GR 5 ZP.....	3	
16	172259	BOLT – shoulder, 3/8-16 UNC .....	4	
17	144832	MOTOR – hydraulic M & S 1.52 CI .....	1	
	132759	SEAL KIT – M & S MOTOR		
18	18709	SETSCREW – hex head, socket cup pt 3/8 NC x 5/8 LG .....	2	
19	18664	NUT – hex jam, 3/8-16 UNC GR 5 ZP .....	2	
20	120845	SEAL – Nilos LSTO steel disk.....	3	
21	145249	BOLT – hex head, 5/8 NF x 1.0 LG GR 5 ZP.....	3	
22	30441	WASHER – hardened .....	3	
23	145593	ROD – adjuster weldment .....	1	
24	145345	ROD – adjuster weldment .....	1	
28	144602	PANEL – rear weldment.....	1	
29	172747	SKID – complete with reflectors .....	1	
30	115145	REFLECTOR – fluorescent red-orange .....	1	
31	115147	REFLECTOR – red .....	1	
32	145357	BRACKET – idler arm .....	1	
38	144652	BAR – stiffener .....	1	
39	144851	DEFLECTOR – seal .....	1	
40	144558	BUSHING – steel .....	1	
41	144597	SEAL – backsheet.....	1	
42	165304	DRAPER – endless, DWA.....	1	
44	37687	MOULDING .....	2	
46	18598	WASHER – SAE flat, 13/32 ID x 13/16 inch OD ZP .....	2	
47	19966	BOLT – round head, square neck, 3/8 NC x 1.25 LG GR 5 ZP .	1	
48	18604	PIN – cotter 3/32 dia. x 3/4 ZP .....	1	
56	50186	NUT – flange, lock, smooth face, dist thd, 1/2-13 UNC ... GR 5	7	
57	21471	BOLT – round head, square neck, 1/2 NC x 1.25 GR 5 ZP .....	1	
58	18590	NUT – hex, 3/8-16 UNC GR 5 ZP .....	4	
60	11695	WASHER – flat.....	3	
63	30228	NUT – flange, distorted thread, smooth face, 3/8-16 UNC .....	15	
64	21066	BOLT – round head, square neck, 1/2 NC x 1 GR 5 ZP .....	1	
65	18671	FITTING – lube 1/4-28 UNF .....	1	
66	135157	SCREW – machine .....	14	
67	176063	SHAFT - threaded .....	1	
69	18593	NUT – hex, 3/4-10 UNC GR 5 ZP .....	2	
70	18689	NUT – hex, lock, distorted thread, 3/4-10 UNC.....	2	
71	30695	FITTING – hydraulic connector .....	2	
72	132867	HOSE – hydraulic.....	2	
73	176077	HOSE – hydraulic.....	1	
74	50104	FITTING – elbow 90° hydraulic.....	1	
75	135266	FASTENER – cable tie, light blue .....	1	
	NOTE 1.	RE ITEM 67: Prior production units used a hex head bolt in this location. When replacing bolt with newer design threaded shaft, also order one each of nuts, items 69 and 70 for head end.		

### Deck supports and linkage (illustration 1)

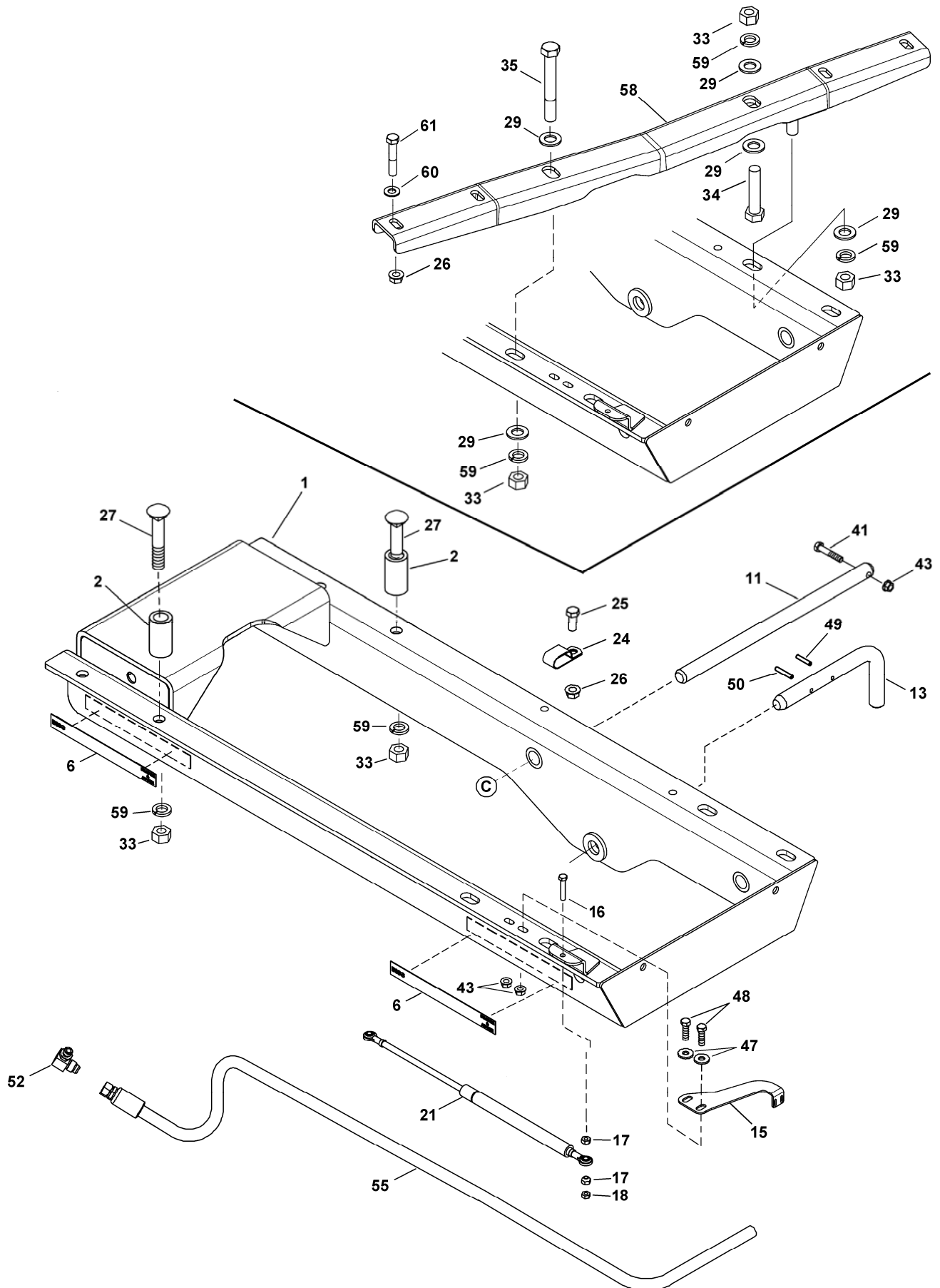




## REPAIR PARTS

REF	PART NUMBER	DESCRIPTION	QTY	SERIAL NUMBER
4	172746	ARM – decal assembly.....	1	
5	174683	DECAL – warning DWA linkage pinch point, 2 panel.....	2	
8	144592	ARM – front weldment.....	1	
9	144593	ARM – bottom weldment.....	1	
10	144594	CLEVIS – weldment.....	1	
11	172910	SHAFT.....	1	
12	176018	SHAFT.....	1	
14	176023	SHAFT.....	1	
16	109699	SWITCH – snap action.....	1	
17	110845	HARNESS – DWA.....	1	
18	144826	CYLINDER – hydraulic.....	1	
	176031	SEAL KIT – for cylinder		
19	172664	CLEVIS.....	1	
20	144996	JOINT ASSEMBLY.....	1	
28	30816	BOLT – round head, square neck, 5/8 NC x 5 TFL GR 5 ZP.....	1	
30	18592	NUT – hex, 5/8-11 UNC GR 5 ZP.....	2	
31	176009	WASHER – Nordlock, 3/4" SP.....	4	
32	30512	BOLT – hex head, 3/4 NC x 2.0 LG GR 5 ZP.....	4	
36	18626	PIN – clevis.....	1	
37	18648	PIN – cotter, 3/16 dia. x 1.25 ZP.....	4	
38	20312	PIN – clevis.....	1	
39	18627	PIN – clevis.....	2	
41	21354	BOLT – hex head, 3/8 NC x 2.0 LG GR 5 ZP.....	4	
42	22072	WASHER – flat.....	1	
43	30228	NUT – flange, distorted thread, smooth face, 3/8-16 UNC.....	5	
44	19966	BOLT – round head, sq. neck, 3/8 NC x 1.25 LG GR 5 ZP.....	1	
45	135158	SCREW – pan head, #6-32 x 3/4 LG.....	2	
46	135159	NUT – Nyloc.....	2	
51	18671	FITTING – lube, 1/4-28 UNF.....	4	
53	30282	FITTING – elbow 90° hydraulic.....	1	
54	144805	HOSE – hydraulic.....	1	
56	176072	DECAL – header position, vertical format.....	1	
62	172903	TUBE.....	1	
63	144870	RAIL WELDMENT.....	1	
64	139491	PLATE – handrail adapter (M155/M205 only).....	1	
65	21449	BOLT – hex head flange (serr. face) ½ NC X 1.0 GR 5 ZP.....		
66	50186	NUT – flange lock, smooth face, 0.500-13UNC GR5.....		
67	138744	HARNESS – M205, DWA extension (use if required).....	1	
	176213	KIT – DWA rail adapter		

## Deck supports and linkage (illustration 2)

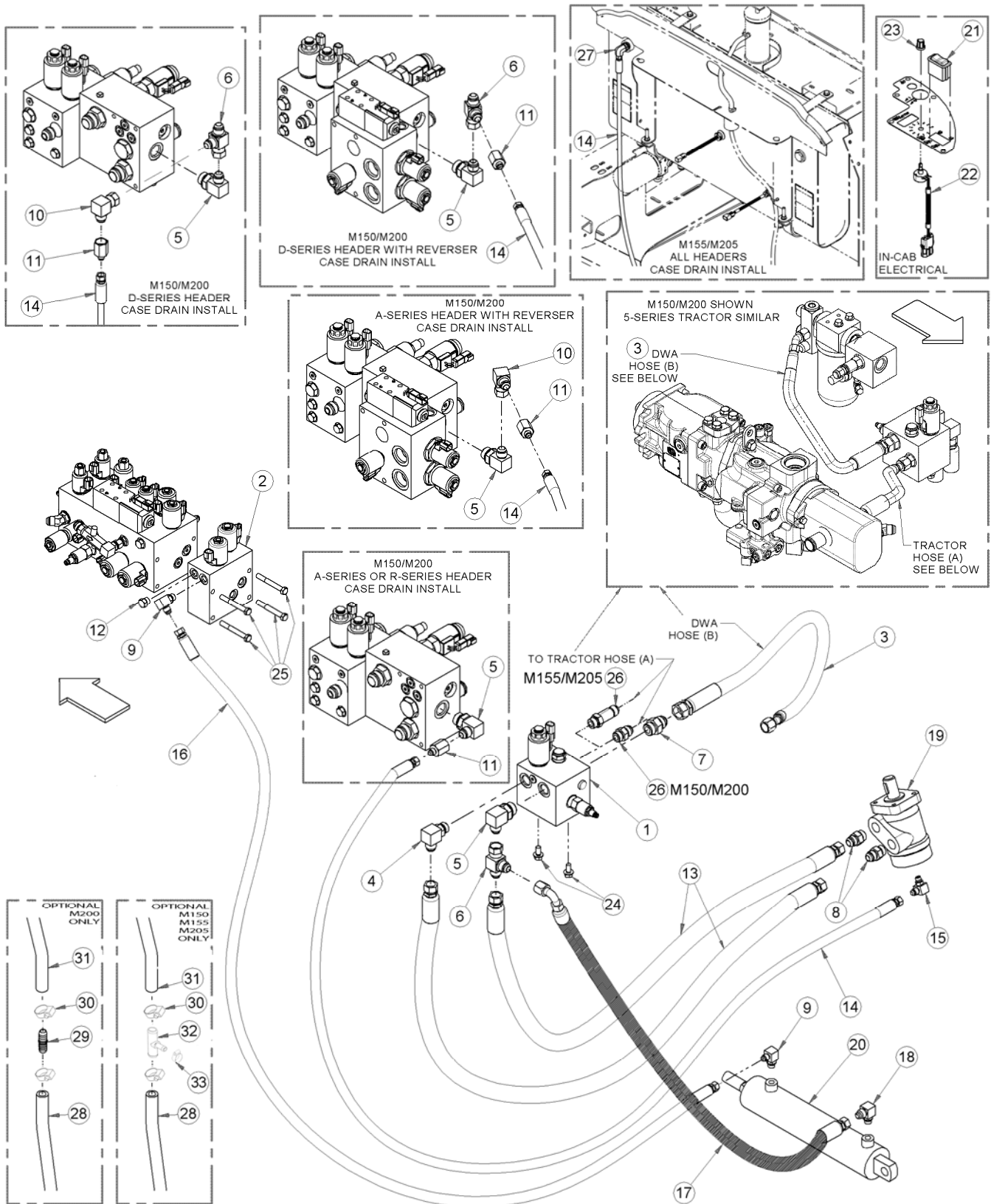


## REPAIR PARTS

REF	PART NUMBER	DESCRIPTION	QTY	SERIAL NUMBER
1	144590	SUPPORT WELDMENT KIT, consists of 176062, Items 2, 15, 58 & hardware.	1	-185859
	176062	SUPPORT WELDMENT.....	1	185860
2	144587	SPACER – 1-1/2" OD x 1" ID x 2-3/4" long .....	2	
6	176071	DECAL – header position, horizontal format .....	2	
11	172910	SHAFT .....	1	
13	176016	PIN – L.....	1	
15	144853	SUPPORT .....	1	
16	176067	BOLT – hex head, 5/16 NC x 1-3/4 inch TFL GR 5 ZP .....	2	
17	35689	NUT – special (taper facing rod end) .....	4	
18	18589	NUT – hex, 5/16 NC .....	2	
21	176066	CYLINDER – gas spring.....	1	
24	103738	CLAMP – PVC insulated 13/16" tube size .....	2	
25	21491	BOLT – hex head, 1/2 NC x 1.25 LG GR 5 ZP .....	2	
26	50186	NUT – flange lock, smooth face, dist. thd, 1/2-13 UNC GR 5....	6	
27	102266	BOLT – RHSSN, 3/4 NC X 4.5 LG GR 5 ZP .....	2	
29	18601	WASHER – SAE flat, 13/16 ID x 1.5 inch OD ZP .....	5	
33	18593	NUT – hex, 3/4-10 UNC GR 5 ZP .....	5	
34	30896	BOLT – hex head, 3/4-10 UNC x 3.50 LG.....	1	
35	30549	BOLT – hex head, 3/4 NC x 5.5 LG GR 5 ZP .....	1	
41	21354	BOLT – hex head, 3/8 NC x 2.0 LG GR 5 ZP .....	1	
43	30228	NUT – flange, distorted thread, smooth face, 3/8-16 UNC .....	3	
47	20535	WASHER – flat .....	2	
48	21264	BOLT – hex head, 3/8 NC x 1.25 LG GR 5 ZP .....	2	
49	16266	PIN – spring, 1/4 dia. x 1.25 LG .....	1	
50	2147	PIN – spring, 1/4 dia. x 1.5 LG .....	1	
52	21805	FITTING – elbow hydraulic.....	1	
55	144806	HOSE – hydraulic .....	1	
58	176060	CHANNEL WELDMENT .....	1	
59	18640	WASHER – lock, 3/4 .....	5	
60	18599	WASHER – flat, 17/32 inch I.D.....	4	
61	21880	BOLT – hex head, 1/2 NC x 2.75 long, Gr 5, ZP.....	4	

# REPAIR PARTS

## HYDRAULICS AND IN-CAB ELECTRICAL



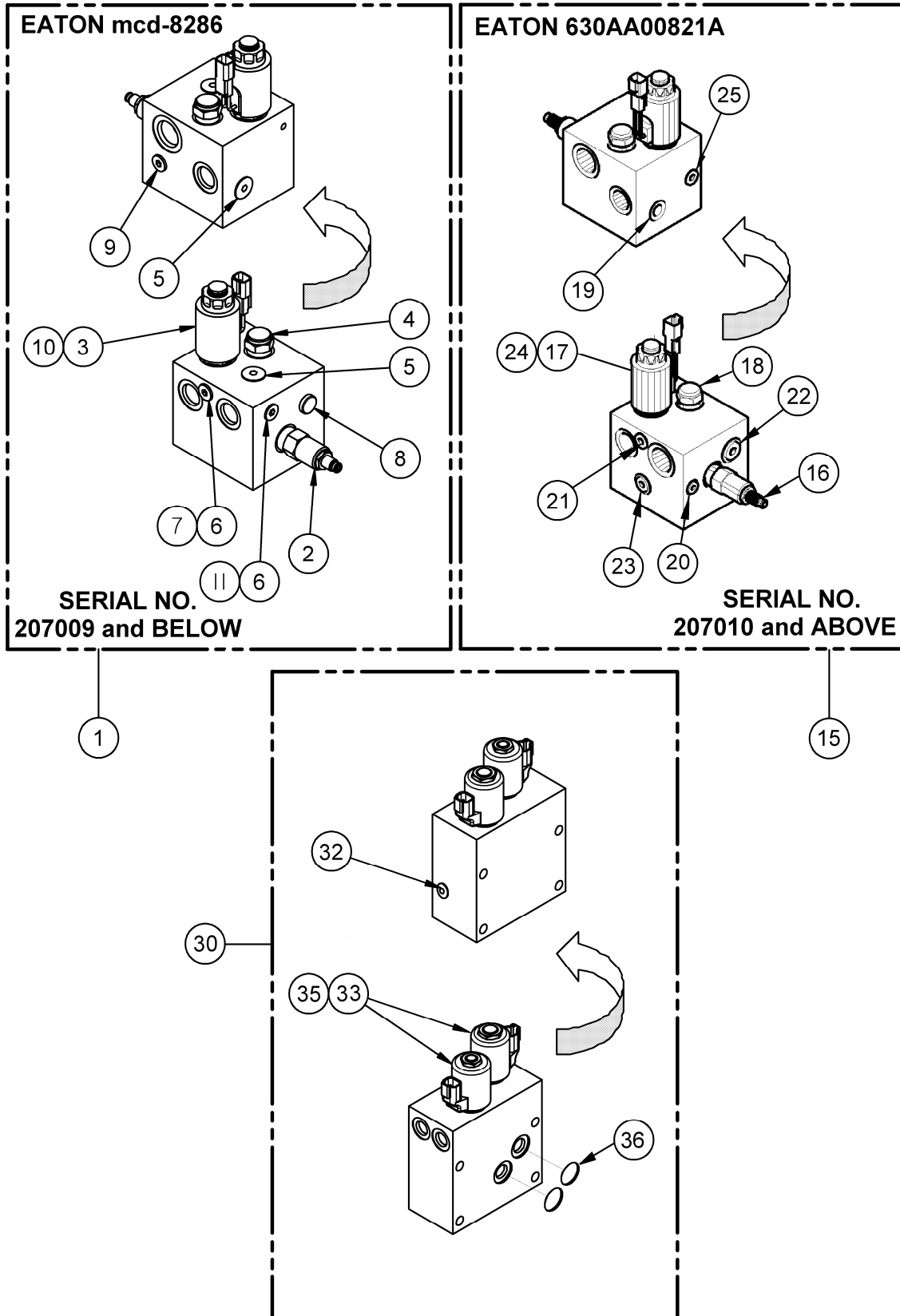


## REPAIR PARTS

REF	PART NUMBER	DESCRIPTION	QTY	SERIAL NUMBER
1	139508	MANIFOLD – DWA drive, see next page for service parts .....	1	See NOTE 1
2	139974	VALVE BLOCK AUX LIFT, see next page for service parts.....	1	
3	144807	HOSE – hydraulic .....	1	
4	21843	FITTING – elbow 90° hydraulic .....	1	
5	50221	FITTING – elbow 90° hydraulic .....	2	
6	50102	FITTING – hydraulic tee .....	2	
7	21830	FITTING – hydraulic connector .....	1	
8	30695	FITTING – hydraulic connector .....	2	
9	30282	FITTING – elbow 90° hydraulic .....	2	
10	30556	FITTING – elbow 90° hydraulic .....	1	
11	118084	FTG – hydraulic reducer .....	1	
12	30994	PLUG – hex CW O-ring .....	2	
13	132867	HOSE – hydraulic .....	2	
14	176077	HOSE – hydraulic .....	1	
15	50104	FITTING – elbow 90° hydraulic .....	1	
16	144805	HOSE – hydraulic .....	1	
17	144806	HOSE – hydraulic .....	1	
18	21805	FITTING – elbow hydraulic.....	1	
19	REF	MOTOR – see "DRAPER & DECK"		
20	REF	CYLINDER – see "DECK SUPPORTS & LINKAGE"		
21	109575	SWITCH – rocker, MOM-OFF-MOM .....	1	
22	109718	GAUGE – potentiometer .....	1	
23	138691	KNOB – speed control.....	1	
24	21821	BOLT – HH FLG (SERR FACE) 3/8 NC X 0.75 GR 5 ZP .....	2	
25	21568	BOLT – HH 3/8 NC X 3.0 LG – units with 1 aux. drive block .....	4	
	10948	BOLT – HH 3/8 NC X 5.5 LG – units with 2 aux. drive blocks.....	4	
26	30695	FITTING – connector hydraulic – M150 / M200 windrowers .....	1	
	135848	FITTING – adapter, long – M155 / M205 windrowers .....	1	
27	135352	FITTING – elbow 90° hydraulic – M155 / M205 windrowers .....	1	
28	110764	HOSE – 5/8 I.D. – extension for tank breather/overflow hose..... Prevents overflow fluid dropping onto DWA draper deck	1	
29	176069	FITTING – jointer, plastic – 5/8 heater hose – M200 only .....	1	
30	21349	CLAMP – hose gear type, 14/32 range .....	2	
31	REF	HOSE – hydraulic oil tank breather/overflow		
32	134055	FITTING – plastic tee – M105/M155/M205	1	
33	30500	CLAMP – hose gear type, 6/16 range	1	
	NOTE 1	See Service Bulletin SB 1210 regarding software update required.		

# REPAIR PARTS

## Hydraulic Service Components

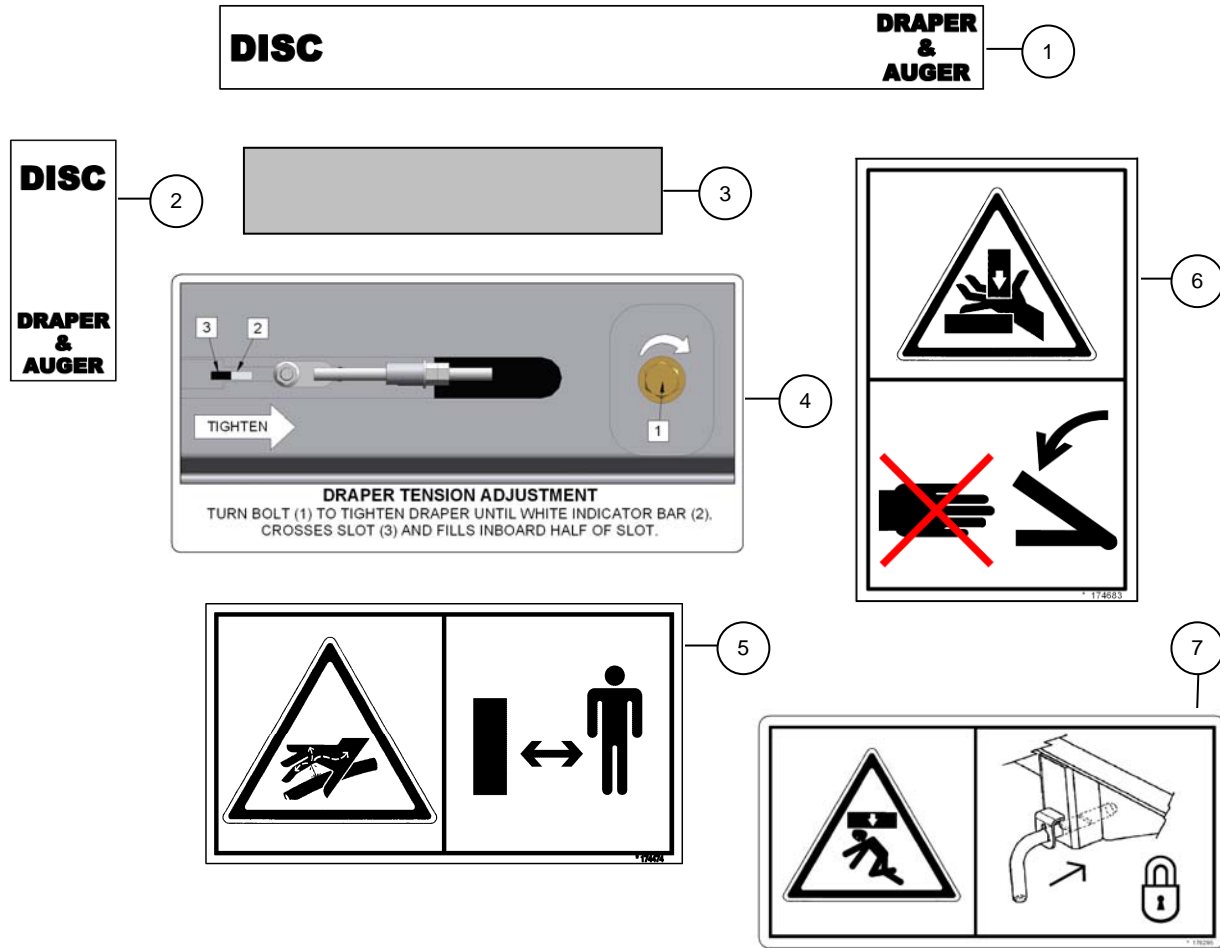


## REPAIR PARTS

REF	PART NUMBER	DESCRIPTION	QTY	SERIAL NUMBER
1	Not Avail. 49846	MANIFOLD – DWA drive, to replace complete unit order 139508. SEAL KIT	1	-207009
2	162285	VALVE – relief .....	1	
3	163166	CONTROL – proportional flow .....	1	
	163178	SEAL KIT	1	
4	162283	VALVE – diff. press sensing .....	1	
	162284	SEAL KIT #10 3 WAY – short.....	1	
5	163159	FITTING – zero leak gold, 3/4-16 .....	2	
6	163156	FITTING – zero leak gold, 9/16-18 .....	2	
7	163168	PLUG – orifice .....	1	
8	158174	PLUG – hex socket c/w o-ring .....	1	
9	163149	FITTING – zero leak gold, 1/2-20 .....	1	
10	163173	COIL – assembly .....	1	
11	162287	PLUG – orifice .....	1	
15	139508 49846 100577	MANIFOLD – DWA drive .....	1	207010-
		SEAL KIT		
		PLUG – hex socket c/w o-ring, 9/16-18		
16	139542	VALVE – relief .....	1	
17	163166	CONTROL – proportional flow .....	1	
	163178	SEAL KIT		
18	162283	VALVE – diff. press. sensing .....	1	
	162284	SEAL KIT #10 3 WAY - short		
19	163159	FITTING – zero leak gold, 3/4-16 .....	2	
20	163167	SENSE CHECK KIT .....	1	
21	163168	PLUG – orifice .....	1	
22	158174	PLUG – hex socket c/w o-ring .....	1	
23	163149	FITTING – zero leak gold, 1/2-20 .....	1	
24	163173	COIL – assembly .....	1	
25	162287	PLUG – orifice .....	1	
30	139974	VALVE BLOCK AUX LIFT .....	1	See NOTE 1
32	163156	FITTING – zero leak gold .....	1	
33	163143	VALVE – solenoid (includes nut 163191) .....	2	
	163191	NUT – special		
	163160	SEAL KIT .....	2	
35	163154	COIL – tough .....	2	
36	163184	O-RING	2	
	NOTE 1	See Service Bulletin SB 1210 regarding software update required.		

## REPAIR PARTS

### Decals



REF	PART NUMBER	DESCRIPTION	QTY	SERIAL NUMBER
1	176071	DECAL – header position, horizontal format .....	3	
2	176072	DECAL – header position, vertical format .....	1	
3	115146	REFLECTOR – amber .....	1	
	115145	REFLECTOR – fluorescent red-orange.....	1	
	115147	REFLECTOR – red.....	1	
4	220084	DECAL – draper tension.....	1	
5	174474	DECAL – warning, high pressure hydraulics, 2 panel .....	1	
6	174683	DECAL – warning DWA linkage pinch point, 2 panel .....	2	
7	176295	DECAL – deck lift lock		



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