

# LAN84207 Installation Instructions

Single Point Hydraulic Kit for 50 Series STS Combines.

# LANKOTA<sup>®</sup>

**270 West Park Avenue**

**Huron, SD 57350**

























**866-526-5682**

# Numerical Parts List

<b>Part Numbers</b>	<b>Description</b>	<b>Quantity</b>
LANH201368	Single Point Hydraulic Cover	1
LANH202240	Seal Strip	2
LANAH206278	Single Point Mount Bracket	1
LANAH204601	Hose Cover Mount Bracket	1
LANH204885	Hose Cover	1
LAN3PLK-0-5AFC	Combine Half of Single Point	1
LAN84207HK	Hose Kit	1
	LANAH206892    229" Hose    Light Blue	1
	LANAH206891    229" Hose    Green	1
	LANAH206893    227" Hose    Dark Blue	1
	LANAH208408    29" Hose	1
	LANAH206895    81" Hose    Yellow	1
	LANAH206894    77" Hose    Red	1
	LANFS6500-10-10    Hyd. Adapter	3
	LANFS6500-8-8    Hyd. Adapter	1
	LANFS6803-10-10-10    Hyd. Adapter	1
LAN6FF	Hyd. Cap	2
RED-TRC-TAPE	Anti Skid Tape	1
LAN209735	Wiring Harness	1
LANH175881	Wiring Harness Snap Ring	1
LAN84207/9BH	Bag of Hardware	1
	* LAN19M7784 M10 X 20 Flange Head Bolt	2
	* LAN14M7296 M10 Serrated Flange Lock Nut	2
	* LAN19M7865 M8 X 15 Flange Head Bolt	4
	* LAN14M7298 M8 Serrated Flange Lock Nut	2
	* LAN37M7092 M8 X 15 Self Tapping Bolt	5
	* REDVTG5    24" Cable Ties	12

\*included in bag of hardware.

# Pictorial Parts List

 LAN209735 (1)	 LAN19M7784 (2)	 LANAH206278 (1)	 LANH175881 (1)	 LANH202240 (2)	 LANAH206891
 LAN3PLK-0-5AFC (1)	 LANH204885 (1)	 LANH201368	 REDVTG5 (12)	 LAN14M7296 (2)  LAN19M7865 (4)	 LANAH206894
 LAN14M7298 (2)	 LAN37M7092 (5)	 LANAH204601	 LAN6FF (2)	 LANFS6500-10-10 (3)	 LANAH206893
 LAN6803-10-10-10	 LANFS6500-8-8	 LANAH208408	 RED-TRC-TAPE (1)	 LANAH206895	 LANAH206892

# 1. Preparation

- 1.1 Park combine on clean level surface. Lower feeder house to 12" – 20" off the ground.
- 1.2 Support feeder house with jack stands or equivalent. Continue to depress switch for 5 seconds to relieve system pressure.
- 1.3 Shut off engine, remove key.
- 1.4 Set parking brake.

# 2. Removing Shields

Refer to Figure 2.1

- 2.1 Remove front feeder house shields on LH side of combine. Remove RH feeder house shields as well.
- 2.2 Contour Master™ combines only:

**NOTE:** Remove black rubber flap on top of feeder house. Remove mounting tube also.



Figure 2.1

Refer to Figure(s) 2.2 & 2.3

2.3 Remove panels (A) & (B) as indicated in Figure 2.2.

2.4 Remove shields (A), (B), (C) and (D) as indicated in Figure 2.3. Retain all hardware for reassembly. You will need to remove bolts indicated within the circle.

Figure 2.2

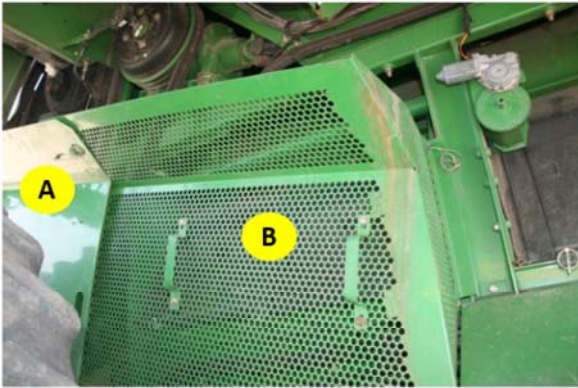
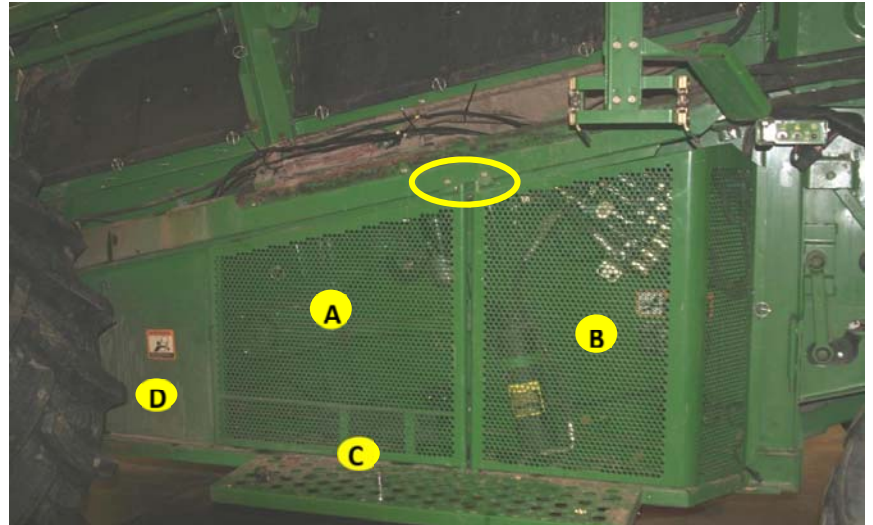


Figure 2.3



Refer to Figure(s) 2.4 & 2.5

2.5 Remove lock nuts as shown in circles. Remove shield. See Figure 2.4.

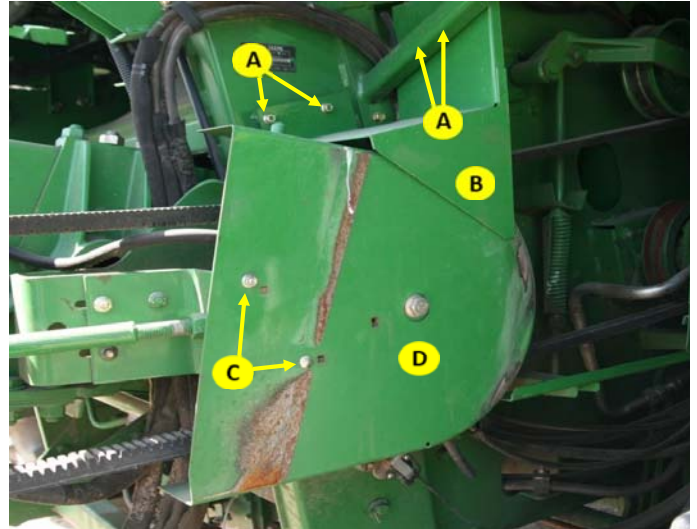
2.6 Remove cap screws (A) from shield (B). Then remove shield. See Figure 2.5.

2.7 Remove cap screws (C) from shield (D). Then remove shield. See Figure 2.5.

Figure 2.4



Figure 2.5



### 3. Locating and Drilling Mounting Holes

Refer to Figure(s) 3.1, 3.2, 3.3 & 3.4

3.1 IF EQUIPPED WITH CONTOUR MASTER™: Position multi-coupler bracket (LANAH206278) over curtain hanger mount as shown in Figure 3.1.

3.2 Combines without CONTOUR MASTER™: Measure from the feeder house pivot casting edge (A) to the edge of multi-coupler bracket (B) a distance of 29 1/2". See Figures 3.2 & 3.3.

3.3 Mark holes on the feeder house. Use bracket as a template for marking mounting holes. Use a center punch to center holes before drilling.

Figure 3.1



Figure 3.2

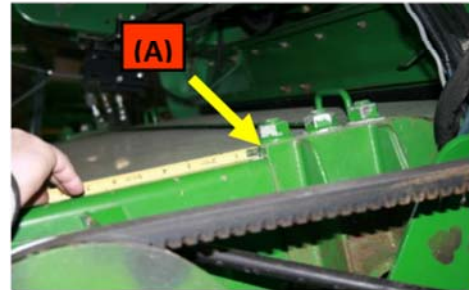


Figure 3.3

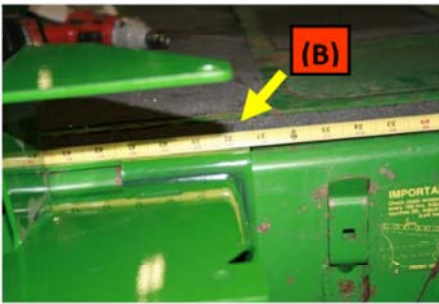
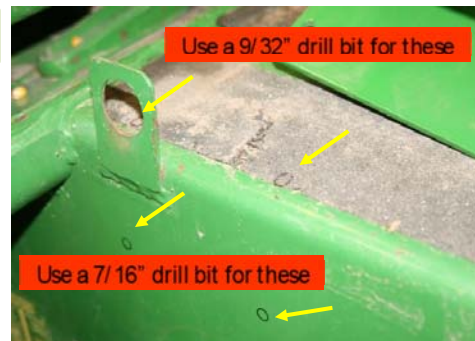


Figure 3.4



Refer to Figure(s) 3.5, 3.6, & 3.7

3.4 If equipped with Contour Master™, install multi-coupler bracket (LANAH206278) over curtain hanger. See Figure 3.5.

3.5 Mount bracket to feeder house. Open access door on top of feeder house to install bolts and retain using lock nuts. Use (2) M10X20 (LAN19M7784) flange head bolts on outside of feeder house and (2) M10 serrated flange lock nuts (LAN14M7296) on inside of feeder house. Do not tighten at this time. Use (2) M8X15 self-tapping screws (LAN37M7092) to attach mount on the top of the feeder house. Tighten all bolts, nuts and screws at this time. See Figure 3.6 & 3.7.



Figure 3.5



Figure 3.6



Figure 3.7



Refer to Figure(s) 3.8, & 3.9

Note: If equipped with Contour Master™, install pipe trough rubber flap indicator and retain using quick lock pin as earlier removed in "Removing Shields" section of these instructions.

3.6 Locate Hose Cover Bracket (LANAH204601). Measure a distance of  $3 \frac{15}{16}$ " from the feeder house pivot casting edge (A) down towards the front of the combine. Mark point. Locate the bracket  $11/16$ " in from the edge of the feeder house and place against marked point.

3.7 Use bracket as template to mark holes on feeder house. Use a center punch to center holes before drilling. See Figures 3.8 & 3.9.

3.8 Drill two  $9/32$ " holes on located marks. Retain bracket to feeder house using two M8X15 self-tapping screws (LAN37M7092).

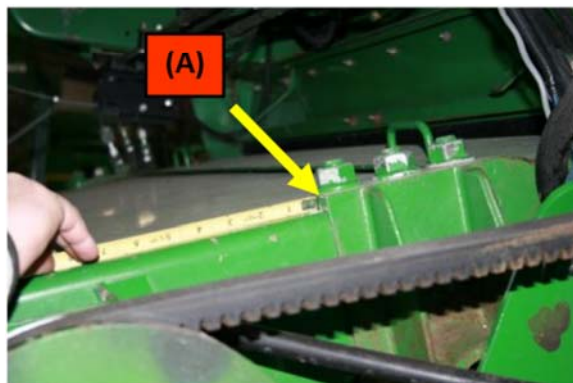


Figure 3.8



Figure 3.9

## 4. Installing and removing hydraulic hose and fittings

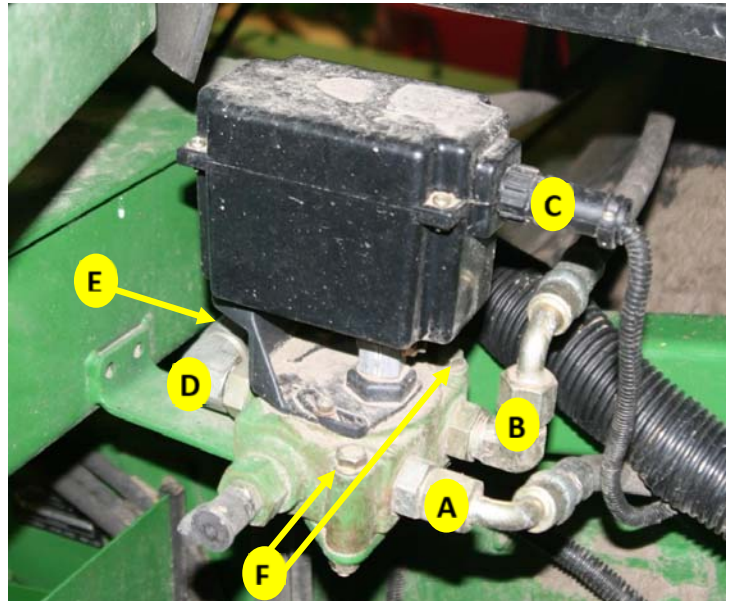
Refer to Figure(s) 4.1

4.1 Install D15032NU vacuum pump on hydraulic reservoir. This will allow removal of hydraulic hoses without draining the reservoir. If vacuum pump is not available, drain reservoir. Funnel hydraulic oil into a clean container. You can refill reservoir with this oil when procedure is complete. See Figure 4.1.



Figure 4.1

4.2 Remove reel pump pressure hydraulic hose (A), reel drive priority hydraulic hose (B), electrical harness connector (C), reel return to filter hydraulic hose (D), and reel drive return hydraulic hose (E) from reel speed control valve. Remove cap screws (F) and nuts and retain. Remove speed control valve from combine.



Refer to Figure(s) 4.3 & 4.4

4.3 Remove and discard fitting (A).

4.4 Loosen nut (B) on elbow fitting (C). Turn fitting (C) 180° so fitting is pointing downward then tighten nut (B).

4.5 Install tee fitting (LANFS6803-10-10-10) fitting onto reel speed control valve and tighten nut. See Figure 4.4.

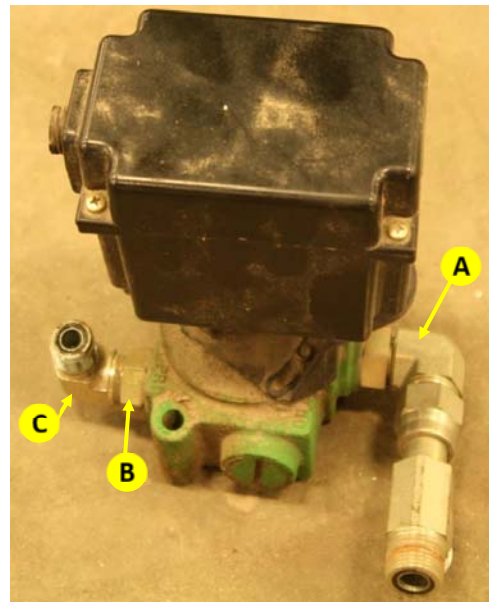


Figure 4.3



Figure 4.4

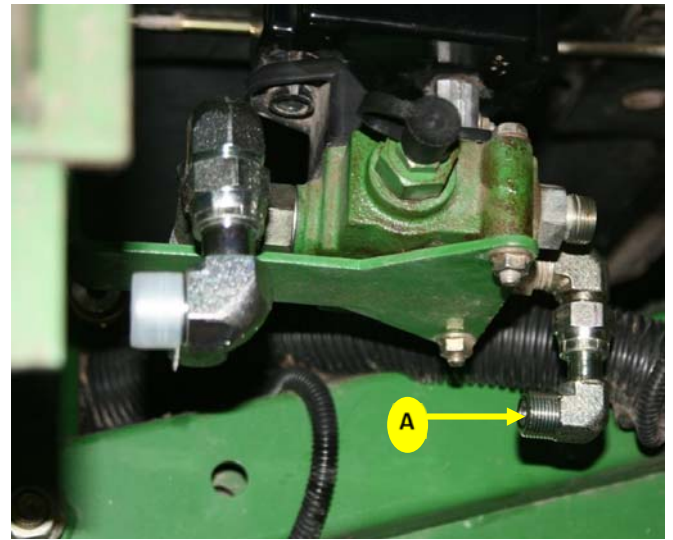
4.6 Install (3) elbow fittings LANFS6500-10-10 onto tee as shown in Figure 4.5. Position the two fittings so they are pointing straight down when reel speed control valve is sitting flat. Position the other fitting so it would be facing straight forward when valve is installed on machine. Tighten fittings.

4.7 Install reel speed control valve onto bracket as removed earlier. Retain using previously removed hardware. Install elbow fitting LAN6500-8-8 onto fitting (A) as shown in Figure 4.6. Tighten fitting so it is positioned facing straight forward towards the front of the machine.

Figure 4.5



Figure 4.6



Refer to Figure(s) 4.7 & 4.8

4.8 Remove and retain lock nut (A), hose clamp (B), (if equipped) and electrical harness clamp (C). Remove and discard hose clamp (D) retaining reel lift hose and reel retract hose. See Figure 4.7 & 4.8.

4.9 Reinstall electrical harness clamp (C) and hose clamp (B) (if equipped). Retain with previously removed lock nut.

Figure 4.7

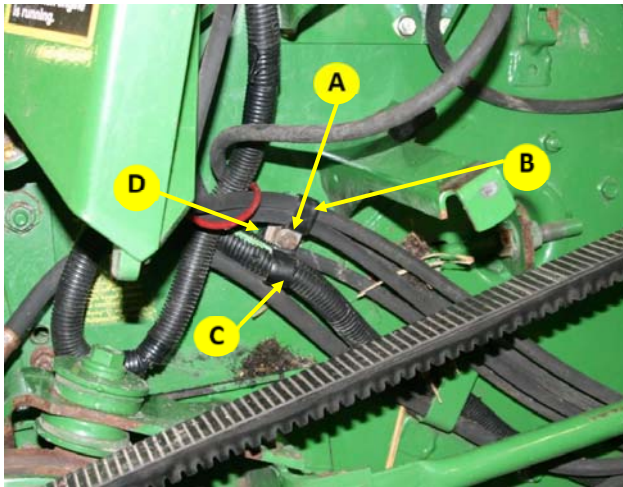
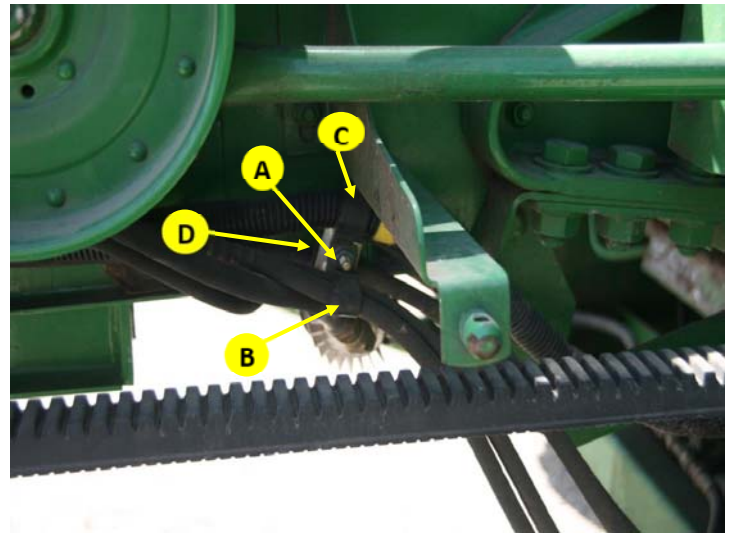


Figure 4.8



4.10 Remove and retain cap screw and locknut (A). Remove and discard hose clamp (B). Pull hydraulic hoses up through feeder house pivot casting. See Figure 4.9.

4.11 Remove and retain hose clamps as circled in Figure 4.10. Remove any other clamps that might be hindering the removal of these hoses.

Figure 4.9

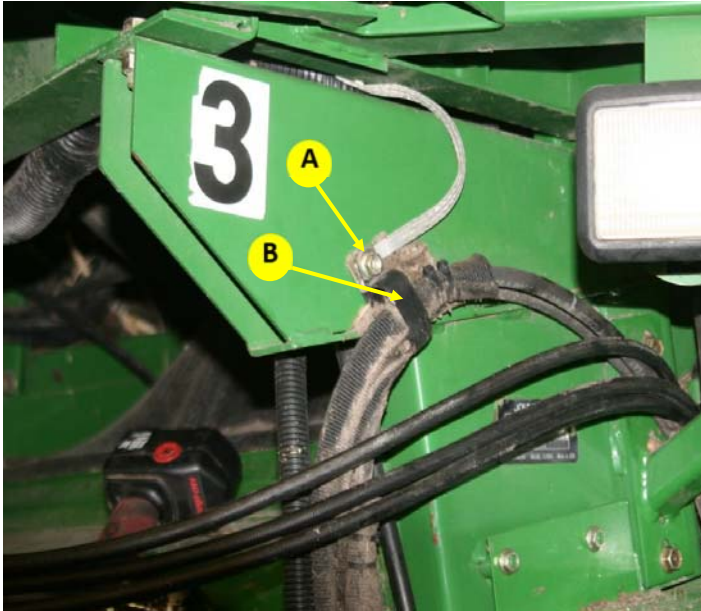


Figure 4.10



Refer to Figure(s) 4.11

Note: Use a clean container to catch any leftover hydraulic fluid. Plug lines when hoses are removed to prevent fluid from escaping.

4.12 Remove reel extend hose (light blue) (if equipped), reel retract hose (dark blue) (if equipped), and reel lift hose (light green). See Figure 4.11.

Note: Remove zip ties as needed that may retain hoses that are being removed.

4.13 Pull reel extend hose (if equipped), reel retract hose (if equipped) and reel lift hose from front of combine and discard hoses.

4.14 Route **new** hydraulic hoses with straight fittings where old hoses were removed. Route hydraulic hoses on back side of variable speed feeder house belt. Pull hoses from back side of combine and route along left-hand side of combine where previously removed hydraulic hoses were located.

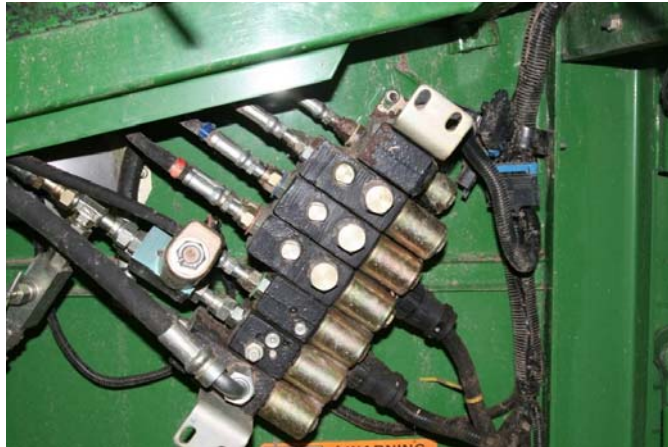


Figure 4.11



Refer to Figure(s) 4.12

Note: Old reel drive hose and return to filter hose routed behind cab to right side of combine will not be used and will need to be removed.

4.18 Route **new** reel drive pressure hose (Yellow) and reel drive return hose (Red) through opening as shown in Figure 4.12.

Note: Do not tighten at this time to prevent binding of hoses.

4.19 Install reel drive pressure hose (Yellow) and reel drive return hose (Red) onto fittings on control valve.

4.20 Install and retain pressure in from pump hose and reel drive priority hose on control valve.



Figure 4.12

Refer to Figure(s) 4.13 & 4.14

4.18 Loosen and remove hydraulic hose (A). See Figure 4.13.

4.19 Remove nut (B) from hydraulic quick coupler (C) and retain quick coupler. See Figure 4.14.

Figure 4.13

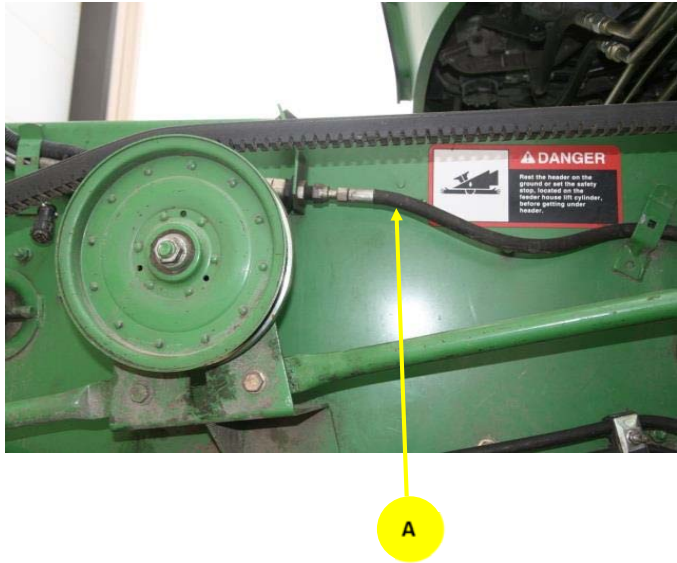
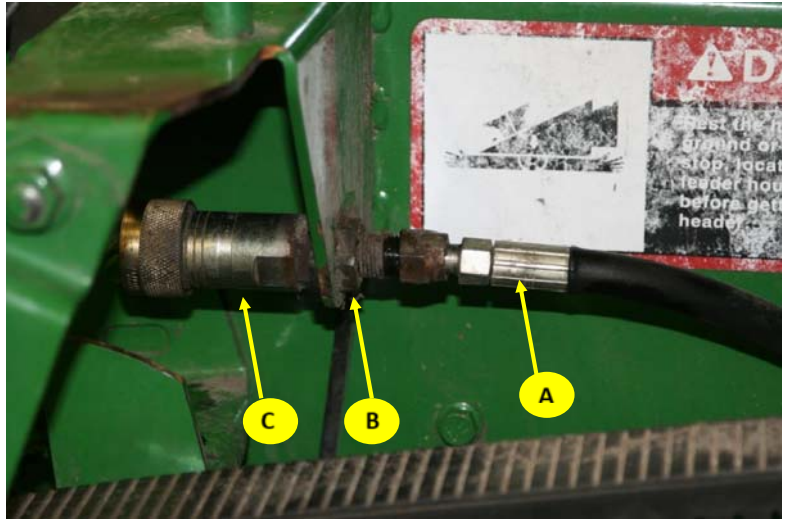


Figure 4.14



Refer to Figure(s) 4.15, 4.16 & 4.17

4.20 Remove and retain fitting from hydraulic quick coupler. Quick coupler will no longer be used. See Figure 4.15. Do not damage o-ring as it will be reused shortly.

4.21 Connect upper variable speed hydraulic hose removed in Figure 4.13 to new hose extension LANAH208408.

4.22 Remove and discard plug from single point hookup. See Figure 4.16.

4.23 Install previously removed fitting with o-ring in single point hookup. Tighten. See Figure 4.17.



Figure 4.15

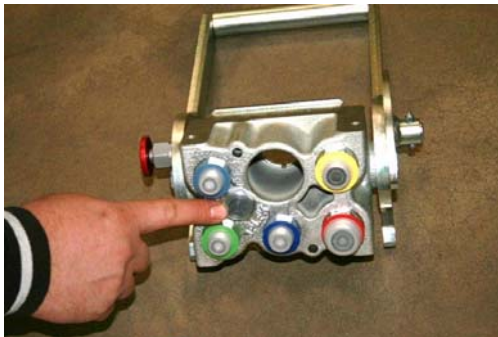


Figure 4.16



Figure 4.17

Refer to Figure(s) 4.18

4.24 Do not tighten hoses at this time as to allow hoses to swivel and prevent binding during installation.

4.25 If combine is not equipped with reel fore & aft, install hydraulic caps (LAN6FF) on the dark & light blue ports to prevent foreign material from entering the hydraulic system. Tighten caps.

4.26 Install reel fore hose (light blue) if equipped, reel drive supply hose (yellow), reel lift hose (green), reel aft hose (dark blue) if equipped, reel drive return hose (red) and upper variable speed extension hose to single point hook up block as shown below in Figure 4.18.

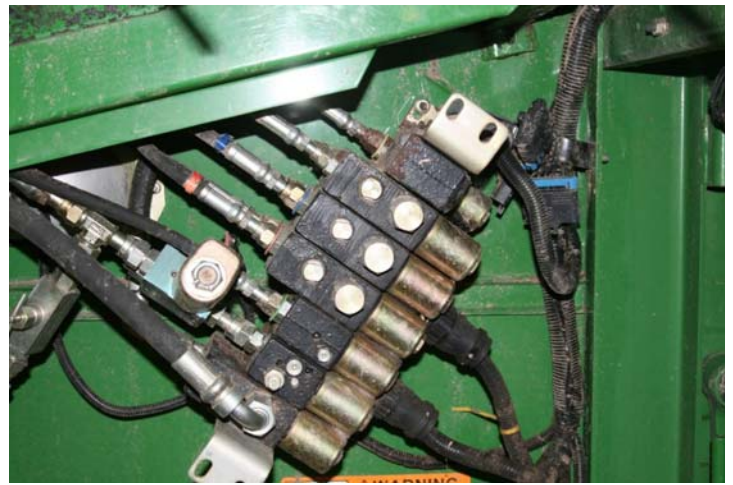


Figure 4.18

Refer to Figure(s) 4.19

4.27 Install and tighten **new** reel lift hose (green), reel extend hose (light blue) (if equipped) and reel retract hose (dark blue) (if equipped). See Figure 4.19.

Figure 4.19



- 4.28 Position single point hookup (LAN3PLK-0-5AFC) as it would be when installed. Tighten all hoses.
- 4.29 Remove D15032NU vacuum pump from hydraulic reservoir if installed.
- 4.30 Install oil cap if removed in earlier steps to drain hydraulic oil. Refill hydraulic reservoir to proper level.

See combine owner's manual for proper hydraulic reservoir oil level.

- 4.31 Mount single point hookup to feeder house bracket and retain with (4) M8X15 screws (LAN19M7865) as shown in Figure 4.20.
- 4.32 Install hose shield LANH204885 over hydraulic hoses. Retain with (2) M8 lock nuts (LAN14M7298) (See Figure 4.21).

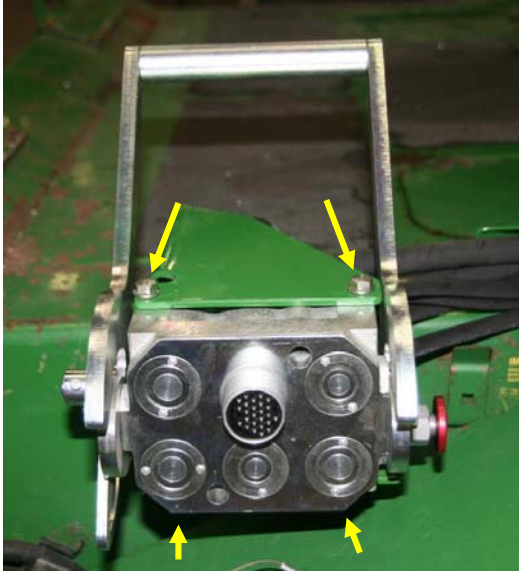


Figure 4.20



Figure 4.21

## 5. Hose cover & Electrical

Refer to Figure(s) 5.1 & 5.2

5.1 Use hole in end of bracket as a template for marking mounting hole. Use center punch to center hole for drilling. Drill a 9/32" hole where indicated. Retain bracket to feeder house using (1) M8X15 self-tapping screws (LAN37M7092) (See Figure 5.1).

5.2 Install anti-slip adhesive pad RED-TRC-TAPE as shown in figure 5.2. Make sure surface is clean and dry before installing adhesive pads to the bracket.

Figure 5.1



Figure 5.2



Refer to Figure(s) 5.3, 5.4 & 5.5

5.3 Remove main wiring harness from storage position on combine (See Figure 5.3). Attach main wiring harness connector to adapter harness LAN209735 (See Figure 5.4). Install electrical harness through single point hookup and align harness with notch in single point block. Retain electrical harness with snap ring LANH175881 (See Figure 5.5).



Figure 5.3



Figure 5.4



Figure 5.5



Refer to Figure(s) 5.6 & 5.7

5.4 Install rubber seals LANH202240 into groove on inside of dust cap LANH201368 as shown in Figure 5.6.

5.5 Install dust cap on single point hookup as shown in Figure 5.7.



Figure 5.6



Figure 5.7

Refer to Figure(s) 5.8 & 5.9

**IMPORTANT:** Leave enough hose so when feeder house is pivoted downward, hydraulic hoses will not be damaged.

5.6 Install previously removed ground cable and hose clamps and retain with cap screws and lock nuts. Reinstall all clamps that were removed earlier in these instructions. Do not tighten until you have defined adequate length for feeder house positioning of full up and full down.



Figure 5.8



Figure 5.9

Refer to Figure(s) 5.10

5.7 Remove and discard hardware, hose clamps & hoses as needed. Refer to circled areas in Figure 5.10.

5.8 Install all shielding as previously removed. Retain with hardware and/or clips. Tighten all hose clamps and accompanying hardware.

5.9 Raise feeder house to remove jack stands. Cycle feeder house to full up and full down positions to double check that there are no binding hoses.



Figure 5.10

For further technical information contact Lankota at 866-526-5682