# LAN84207 Installation Instructions

Single Point Hydraulic Kit for 50 Series STS Combines

# LANGOTA

270 West Park Avenue Huron, SD 57350 866-526-5682

6/23/2021

# Numerical Parts List

LANAH204601 Hose Cover Mount Bracket  LANH204885 Hose Cover for Combine Single Point  LAN3PLK-0-5BFC Combine Half of Single Point Hydraulic Block  LAN209735 Wiring Harness	1 2 1 1 1 1 1 10 ir
LANAH206278  LANAH204601  LANH204885  LAN3PLK-0-5BFC  LAN209735  Single Point Mount Bracket (Combine)  Hose Cover Mount Bracket  Hose Cover for Combine Single Point  Combine Half of Single Point Hydraulic Block  Wiring Harness	1 1 1 1 1
LANAH204601 Hose Cover Mount Bracket  LANH204885 Hose Cover for Combine Single Point  LAN3PLK-0-5BFC Combine Half of Single Point Hydraulic Block  LAN209735 Wiring Harness	1 1 1 1 1
LANH204885 Hose Cover for Combine Single Point LAN3PLK-0-5BFC Combine Half of Single Point Hydraulic Block LAN209735 Wiring Harness	1 1 1
LAN3PLK-0-5BFC Combine Half of Single Point Hydraulic Block LAN209735 Wiring Harness	1 1 1
LAN209735 Wiring Harness	1 1
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1.1.1.0. Pt	_
LANH175881 Internal Snap Ring	10 ir
RED-TRC-TAPE Anti-Skid Tape	
LAN6FF Hydraulic Cap	2
LAN84207HK Hose Kit	1
LANAH206891 229" Hose - Green	1
LANAH206892 229" Hose - Light Blue	1
LANAH206893 227" Hose - Dark Blue	1
LANAH206894 77" Hose - Red	1
LANAH206895 81" Hose - Yellow	1
LANAH208408 29" Hose	1
LANFS6500-10-10 Hyd. Adapter	3
LANFS6500-8-8 Hyd. Adapter	1
LANFS6803-10-10 Hyd. Adapter	1
LAN84207/9BH Bag of Hardware	1
LAN19M7784 M10 x 20mm Flange Hex Bolt	2
LAN14M7296 M10 Serrated Flange Nut	2
LAN19M7865 M8 x 15mm Flange Hex Bolt	4
LAN14M7298 M8 Serrated Flange Nut	2
LAN37M7092 M8 x 15mm Self Tapping Bolt	5
REDVTG5 24" Cable Ties	12

# Pictorial Parts List



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# Preparation

- 1. Attach desired header to the combine. Lock the head to the combine.
- 2. Park combine on clean level surface. Lower feeder house to 12" 20" off the ground.
- 3. Support feeder house with jack stands or equivalent. Continue to depress switch for 5 seconds to relieve system pressure.
- 4. Set the parking brake on the combine.
- 5. Turn off the combine engine and remove the key.

# 1. Removing Shields

### Refer to Figure 1

- 1. Remove front feeder house shields on both sides of combine
- 2. Contour Master™ combines only:

Remove black rubber flap and mounting tube on top of feeder house.



Figure 1

# 1. Removing Shields

### Refer to Figures 2 & 3

- 3. Remove panels (A) & (B) as indicated in Figure 2.
- 4. Remove shields (A), (B), (C) and (D) as indicated in Figure 3. Retain all hardware for reassembly. You will need to remove bolts indicated within the circle.





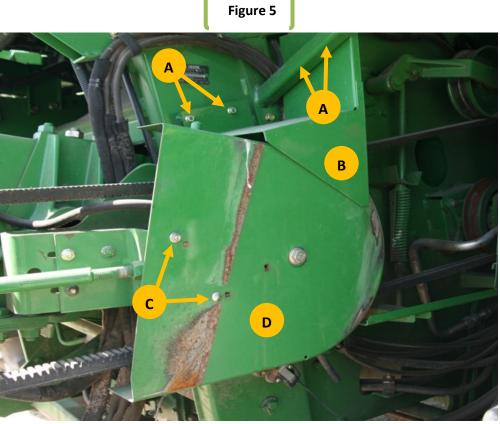
Figure 2

# 1. Removing Shields

### Refer to Figures 4 & 5

- 5. Remove lock nuts as shown in circles in Figure 4. Remove shield.
- 6. Remove cap screws (A) from shield (B). Then remove shield.
- 7. Remove cap screws (C) from shield (D). Then remove shield.





# 2. Locating and Drilling Mounting Holes

### **Refer to Figure 6**

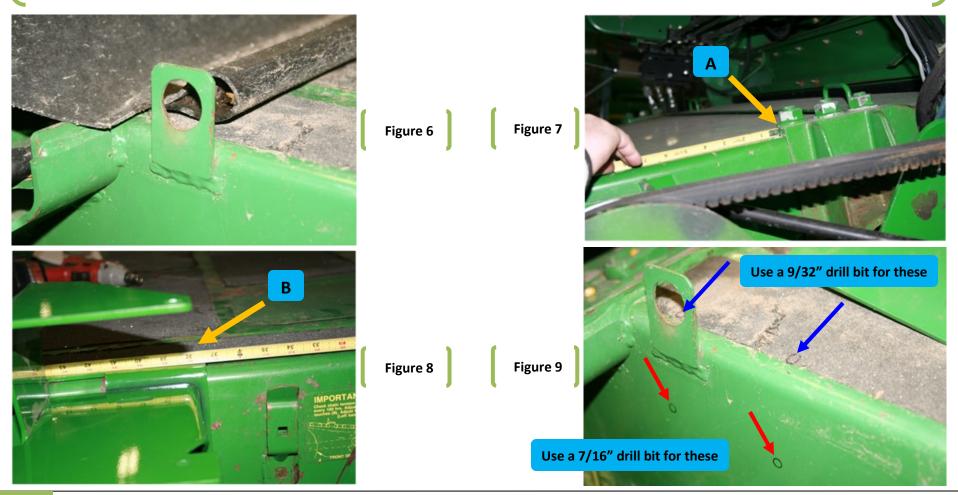
1. IF EQUIPPED WITH CONTOUR MASTER™: Position multi-coupler brackets (LANAH206278) over the curtain hanger mount as shown.

### Refer to Figures 7 & 8

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".

### **Refer to Figure 9**

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.



# 2. Locating and Drilling Mounting Holes



### **Refer to Figure 10**

4. If equipped with Contour Master™, install multi-coupler bracket (LANAH206278) over curtain hanger.

### Refer to Figures 11 & 12

5. Mount bracket to feeder house. Open access door on top of feeder house to install bolts and retain using lock nuts. Use (2) M10 x 20mm (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) M8 x 15mm self-tapping screws (LAN37M7092) to attach mount on the top of the feeder house. Tighten all bolts, nuts and screws at this time.

Figure 10



Figure 11



# 2. Locating and Drilling Mounting Holes

### Refer to Figures 13 & 14

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

- 6. Locate hose cover bracket (LANAH204601). Measure a distance of 3-15/16" 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.
- 7. Use bracket as template to mark holes on feeder house. Use a center punch to center holes before drilling.
- 8. Drill two 9/32" holes on located marks. Retain bracket to feeder house using two M8 x 15mm self-tapping screws (LAN37M7092).

Figure 13



Figure 14



### **Refer to Figure 15**

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.

### **Refer to Figure 16**

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 and nuts (F) and retain.



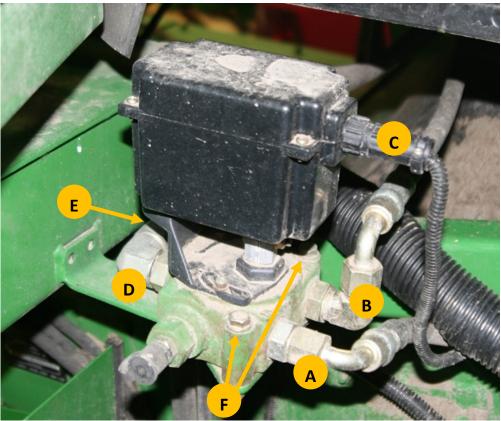


Figure 15

### **Refer to Figure 17**

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

### **Refer to Figure 18**

4. Remove and discard fitting (A). Install tee fitting (LANFS6803-10-10-10) fitting onto reel speed control valve and tighten nut.

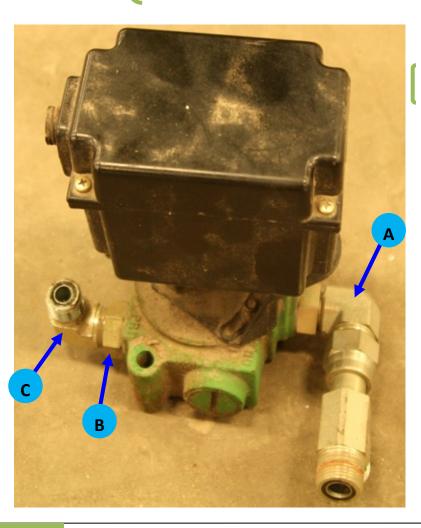


Figure 17

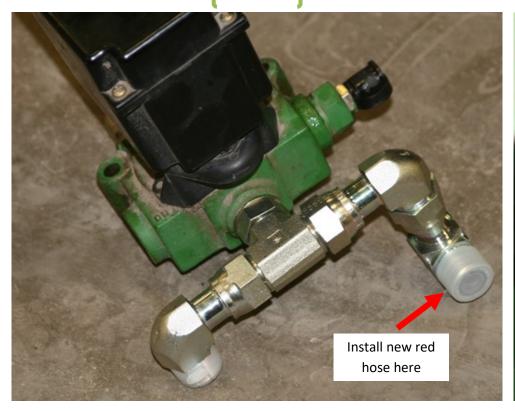
Figure 18

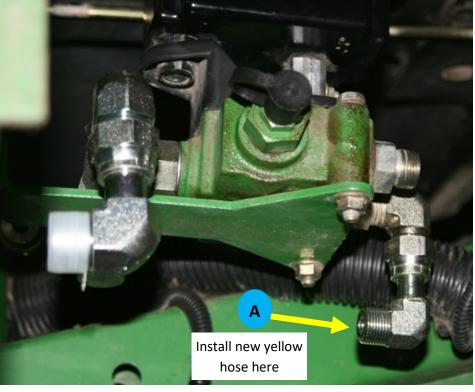


### Refer to Figures 19 & 20

- 5. Install (3) elbow fittings LANFS6500-10-10 onto tee as shown in Figure 19. 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.
- 6. 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 20. Tighten fitting so it is positioned facing straight forward towards the front of the machine.

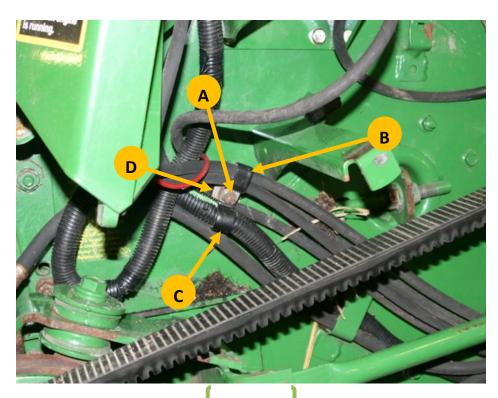






### Refer to Figures 21 & 22

- 7. 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.
- 8. Reinstall electrical harness clamp (C) and hose clamp (B) (if equipped). Retain with previously removed lock nut.



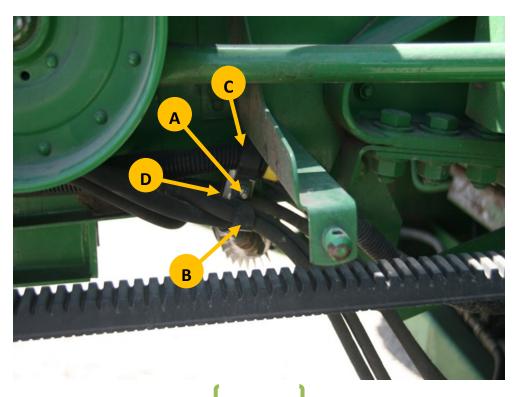


Figure 21

### **Refer to Figure 23**

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

### **Refer to Figure 24**

10. Remove and retain hose clamps as circled. Remove any other clamps that might be hindering the removal of these hoses.





Figure 23

### **Refer to Figure 25**

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

11. Remove reel extend hose (light blue) (if equipped), reel retract hose (dark blue) (if equipped), and reel lift hose (light green).

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

- 12. Pull reel extend hose (if equipped), reel retract hose (if equipped) and reel lift hose from front of combine and discard hoses.
- 13. Route the new hydraulic hoses, with straight fittings, where the old hoses were. Route the 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.

### **Refer to Figure 26**

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.

14. Route new reel drive pressure hose (Yellow) and reel drive return hose (Red) through opening as shown in Figure 3.12.

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

- 15. Install reel drive pressure hose (Yellow) and reel drive return hose (Red) onto fittings on control valve.
- 16. Install and retain pressure in from pump hose and reel drive priority hose on control valve.



Figure 25



### Refer to Figures 27 & 28

- 17. Loosen and remove hydraulic hose (A).
- 18. Remove nut (B) from hydraulic quick coupler (C) and retain quick coupler.



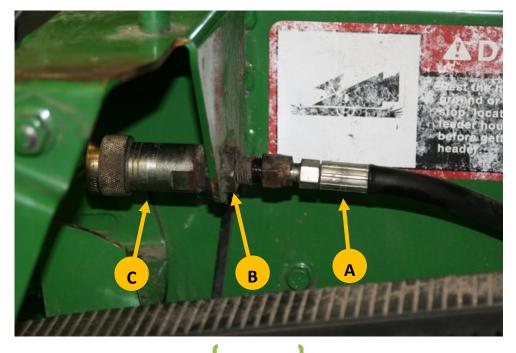


Figure 27

### Refer to Figures 29 - 31

- 19. Remove and retain fitting from hydraulic quick coupler. Quick coupler will no longer be used. Do not damage O-ring as it will be reused.
- 20. Connect upper variable speed hydraulic hose, removed in Figure 27, to new hose extension LANAH208408.
- 21. Remove and discard plug from single point hookup.
- 22. Install previously removed fitting with O-ring in single point hookup. Tighten.





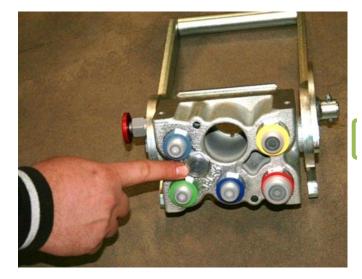


Figure 30



### **Refer to Figure 32**

- 23. If combine is not equipped with reel fore & aft, install and tighten hydraulic caps (LAN6FF) on the dark & light blue ports to prevent foreign material from entering the hydraulic system.
- 24. 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.
- 25. Do not tighten hoses at this time so they swivel and prevent binding during installation.

### **Refer to Figure 33**

26. Install and tighten new reel lift hose (green), reel extend hose (light blue) (if equipped) and reel retract hose (dark blue) (if equipped).



Figure 32



### **Refer to Figure 34**

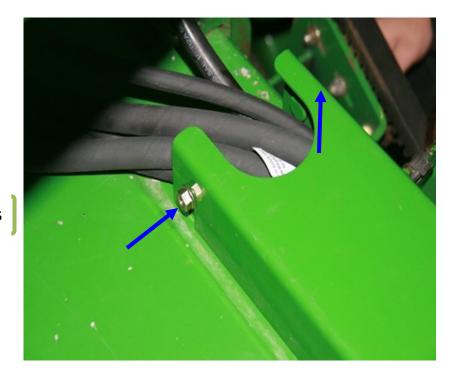
- 27. Position single point hookup (LAN3PLK-0-5BFC) as it would be when installed. Tighten all hoses.
- 28. Remove D15032NU vacuum pump from hydraulic reservoir if installed.
- 29. Install oil cap if removed in earlier steps to drain hydraulic oil. Refill hydraulic reservoir to proper level. See combine owner's manual for proper hydraulic reservoir oil level.
- 30. Mount single point hookup to feeder house bracket and retain with (4) M8 x 15mm screws (LAN19M7865).

### **Refer to Figure 35**

31. Install hose shield LANH204885 over hydraulic hoses. Retain with (2) M8 lock nuts (LAN14M7298).



Figure 34



### **Refer to Figure 36**

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) M8 x 15mm self-tapping screws (LAN37M7092).

### **Refer to Figure 37**

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

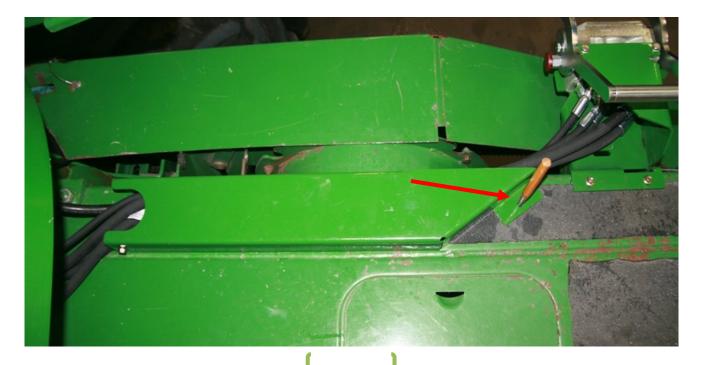






Figure 37



Figure 38



### Figure 39

### Refer to Figures 38 - 40

3. Remove main wiring harness from storage position on combine (Figure 38). Attach main wiring harness connector to adapter harness LAN209735 (Figure 39). Install electrical harness through single point hookup and align harness with notch in single point block. Retain electrical harness with snap ring LANH175881 (Figure 40).



Figure 40

6/23/2021



### Refer to Figures 41 & 42

- 4. Install rubber seals LANH202240 into groove on inside of dust cap LANH201368 as shown.
- 5. Install dust cap on single point hookup.

### Refer to Figures 43 & 44

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

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 42

Figure 43

Figure 44

### **Refer to Figures 45**

- 7. Remove and discard hardware, hose clamps & hoses as needed. Refer to circled areas.
- 8. Install all shielding as previously removed. Retain with hardware and/or clips. Tighten all hose clamps and accompanying hardware.
- 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 45



For further technical assistance,

Call Lankota Inc. at:

1-866-526-5682