LANSS616R16HYD Installation Instructions

Lankota GENERATION II Stalk Stomper® Hydraulic Mounting Kit for JD® 616 & 716 Series Corn Heads

16-Row Coverage

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

Numerical Parts List

art Numbers Description			
LANSS650HH2	Corn Head Tube Stiffener	4	
LANSS6534	96" Stalk Stomper [®] tool bar with 4 tubes @ 30"	1	
LANSS650SVM	Stalk Stomper [®] hyd. selector valve mount bracket	1	
LANSS650BVB	Stalk Stomper [®] ball valve bracket	1	
LANSS650BS	Stalk Stomper [®] bolt spacer	2	
LANSS7B01	Toolbar Mount	4	
LANSS7B03	Cylinder Bracket	4	
LANSS7B04	Cylinder Toolbar Bracket	4	
LANSS7B05	Toolbar Bracket - Hydraulic Kit	6	
LANSS7B06	Toolbar End Mount - Hydraulic Kit - Right Side	1	
LANSS7B06M	Toolbar End Mount - Hydraulic Kit - Left Side	1	
LANSS7B07	End Mount Support - 2014 & Older	2	
LANSS750FE	Toolbar Mount for JD 612 FC	2	
LANSS6560	105" Welded Toolbar	2	
LANSS6580	52" Welded Toolbar	2	
LANSS650TCB	Toolbar Connecting Bracket	2	
LANHYDC967-A	Hydraulic Cylinder	4	
LANSS650EBR	Right Hand End Mount Support - 2015 & Newer	1	
LANSS650EBL	Left Hand End Mount Support - 2015 & Newer	1	
LANSS700I	Inside Bar Support Spacer	2	

Numerical Parts List Continued

art Numbers	Description	Quantity
LANSS750HYDBH	LANSSHYD Bag of Hardware	1
Each Bag Includes:		
LAN506K	1/2"-13 x 1.5" Carriage Bolt	4
LAN079UBOLT	U-bolt 5/8" x 5.125" ID x 6.5" Length	2
LAN600UBOLT	U-bolt 5/8" x 2.265" ID x 3.75" Length	4
LAN690830	5/8" Serrated Flange Nut	12
LAN1137030	1/2"-13 Nyloc Nut	4
LANB714	5/8"-11 X 3.5" Hex Head Bolt	2
LANFWS57	5/8" SAE Flat Washer	8
LAN1626000	5/8"-11 Nyloc Nut	2
RED305K	3/8"-16 x 1.25" Carriage Bolt	4
LAN3718	3/8"-16 Serrated Flange Nut	4
LANEWPG	3/4" X 2.00" Clevis Pin	2
LANFWS58	3/4" SAE Flat Washer	2
LANFWS53	3/8" SAE Flat Washer	2
LAN1618000	3/8"-16 Nyloc Nut	2
LANFOIDJ	1/8" x 1.50" Cotter Pin	2
LANFWS55	1/2" SAE Flat Washer	4
LANFCJ9M0	3/4" Hole Saw	1
LAN44302	Zip Ties	10
LANFH492F	17/32" Drill Bit	1
LANSS704	Bent Pin w/ Twist-Lock Cap	4
LANFCJ9MC	1-3/8" Hole Saw	1
LANFNHVK	1/2"-13 x 2.50" Flanged Bolt	14
LANFNXC1	1/2" Flanged Nylon Lock Nut	14

Numerical Parts List Continued

art Numbers	Description	Quantity
LANSS7B01BH	LANSS7B01 Bag of Hardware	4
Each Bag Includes:		
LAN600UBOLT	U-bolt 5/8" x 2.625" ID x 3.75" Length	2
LAN079UBOLT	U-bolt 5/8" x 5.125" ID x 6.5" Length	2
LAN619UBOLT	U-bolt 5/8" x 6.188" ID x 8" Length	2
LAN690830	5/8" Serrated Flange Nut	8
LANEWPG	3/4" X 2.00" Clevis Pin	1
LANFWS58	3/4" SAE Flat Washer	1
LANFOIDJ	1/8" x 1.50" Cotter Pin	1
LANSS750CYLBH	LANSS750CYLBH	4
Each Bag Includes:		
LAN079UBOLT	U-bolt 5/8" x 5.125" ID x 6.5" Length	2
LAN600UBOLT	U-bolt 5/8" x 2.265" ID x 3.75" Length	2
LANFFCJK	1.00" X 3.00" Clevis Pin	2
LANFWS50	1" SAE Flat Washer	2
LANFOIFO	3/16" X 2" Cotter Pin	2
LAN690830	5/8" Serrated Flange Nut	8
LANSS650FCBH	LANSS650FC Bag of Hardware	1
Each Bag Includes:		
LAN600UBOLT	U-bolt 5/8" x 2.265" ID x 3.75" Length	4
LAN690830	5/8" Serrated Flange Nut	8
LAN3722	1/2"-13 Serrated Flange Nut	4
LANF1ERQ	½"-13 x 2" Carriage Bolt	4

Numerical Parts List Continued

Part Numbers	Description	Quantity
LANSS650TCBBH	LANSS650TCB Bag of Hardware	2
Each Bag Includes:		
LAN600UBOLT	U-bolt 5/8" x 2.625" ID x 3.75" Length	4
LAN690830	5/8" Serrated Flange Nut	8
ANSS616HB	Hose Bundle for 616 Hydraulic Stalk Stompers [®]	1
	18" Hydraulic Hose	2
	41" Hydraulic Hose	4
	55" Hydraulic Hose	4
	75" Hydraulic Hose	2
	78" Hydraulic Hose	2
	295" Hydraulic Hose	2
	9/16" Male JIC x 9/16" Male ORB 90°	6
	9/16" Male JIC Tee	6
	9/16" Male JIC 37° x 9/16" Male ORB	4
	9/16" Male JIC x 9/16" Long Male ORB (bulk head fitting)	2
Only used on 2014 n	nodel year and older:	
	11/16" Male ORFS x 9/16" Male ORB	2
LANSS650SV	3 Way Zero Drop Ball Valve Kit	1
	3 Way Zero Drop Ball Valve (1 Top / 1 Bottom)	2
Only used on 2015 n	nodel year and newer:	
-	11/16" Male ORFS x 9/16" Male ORB - 0.032" Restriction	2
	9/16" Female JIC to 9/16" Male JIC - 0.062" Restriction	2

Pictorial Parts List

		6100			
LANSS7B01 (4)	LANSS7B03 (4)	LANSS7B04 (4)	LANSS7B05 (6)	LANSS650HH2 (2)	LANSS7B06 (1)
-					
LANSS7B07 (2)	LANSS6534 (1)	LANSS6560	LANSS750FE (2)	LANSS700I (2)	LANSS7B06M (1)
LANSS650BS (2)	LANSS650SVM (1)	LANSS650BVB (1)	LANSS650EBL (1)	LANSS650EBR (1)	LANSS6580 (2)
				LANHYDCYLC967-A	
LANSS650TCB (2)	LANSS616HB (1)	LANEWPG (6)	LANFFCJK (8)	(4)	LAN1618000 (2)

Pictorial Parts List

LAN600UBOLT (32)	LAN079UBOLT (18)	LAN619UBOLT (8)	LANFOIDJ (6)	LANF0IF0 (8)	LAN690830 (100)
¢			0		
LAN305K (4)	LANFWS55 (4)	LAN3722 (4)	LANFWS50 (8)	LANFCJ9MC	LANFCJ9M0
¢	T		0		
LAN506K (4)	LANF1ERQ (4)	LANFWS57 (8)	LANFWS58 (6)	LANB714 (2)	LANFWS53 (2)
LAN3718 (4)	LANFH492F	LANFNHVK (14)	LANFNXC1 (14)	LAN44302 (10)	LANSS650SV (1)

Pictorial Parts List



Preparation

- 1. Attach desired header to the combine. Lock the head to the combine.
- 2. Raise the head off the ground and lower the safety stop on the feeder house cylinder.
- 3. Set the parking brake on the combine.
- 4. Turn off the combine engine and remove the key.

Refer to Figure 1.1

1.1 Install one mount (LANSS7B01) roughly 84" from the center of the header. On 2012 and newer heads you may have to cut two holes through the back sheet metal using the 1 3/8" hole saw (LANFCJ9MC) to install the U-Bolts. Do not tighten at this time.

Hardware:

- 8 LAN690830
- 4 LAN079UBOLT 4 LAN619UBOLT
- 5" U-Bolt 6" U-Bolt

2011 & older heads 2012 & newer heads

Refer to Figure 1.2

1.2 Install one mount (LANSS7B01) as far out on each end of the header frame as possible (roughly 66" outside of the previously installed mount). Do not tighten at this time.

Hardware:

4

LAN690830 8 LAN079UBOLT 5/8" Serrated Flange Nut 5" U-Bolt

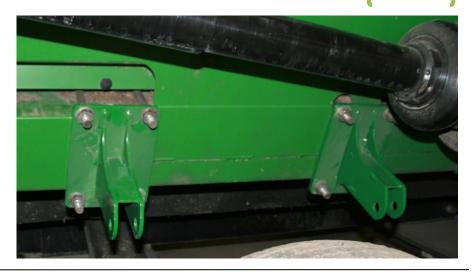
- LAN619UBOLT 4
- 2011 & older heads 6" U-Bolt 2012 & newer heads

5/8" Serrated Flange Nut

Figure 1.1



Figure 1.2



NOTE: Some headers will have existing hardware that can be used to attach the end mounts.

Refer to Figure 1.3

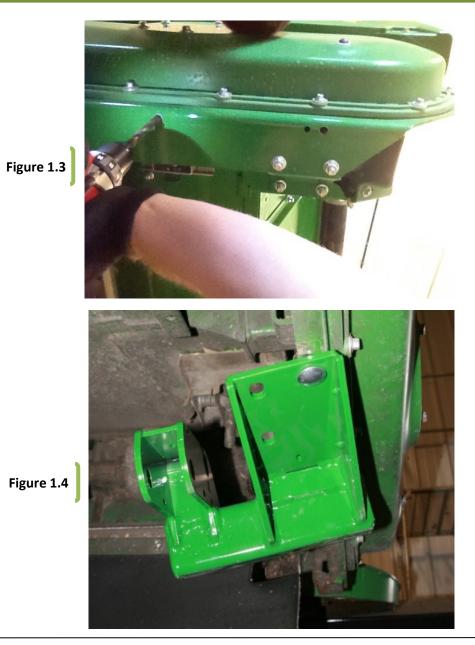
1.3 Locate 2 holes on the vertical end sheets on the right side of the header that align with the Toolbar End Mount (LANSS7B06). Drill these holes out using a 1/2" Drill Bit (LANFH492F).

Refer to Figure 1.4

1.4 Attach the Toolbar End Mount (LANSS7B06). Repeat on other end of header with the LANSS7B06M. Do not tighten at this time.

Hardware:

- 4 LAN506K
- 4 LANFWS55
- 1/2" x 1.25" Carriage Head Bolt 1/2" SAE Flat Washer 1/2" Nuloc Hex Nut
- 4 LAN1137030
- 1/2" SAE Flat Washer 1/2" Nyloc Hex Nut



For 2015 & Newer Heads:

NOTE: Some headers will have existing hardware that can be used to attach the mount supports to the header.

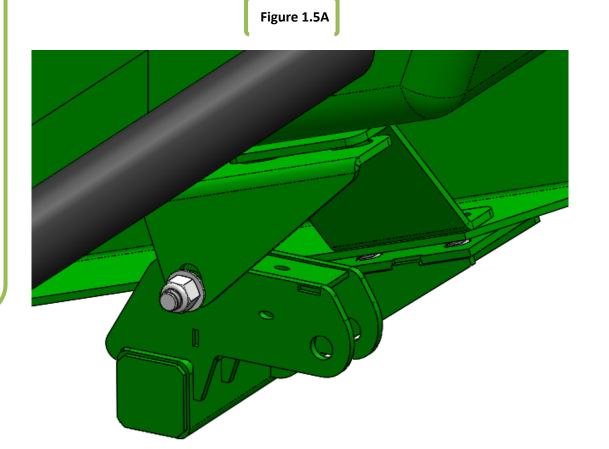
Refer to Figure 1.5A

FIGURE 1.5A SHOWS RIGHT END OF HEADER

1.5 Install end mount support (LANSS650EBL) on left end of header and end mount support (LANSS650EBR) on right end of header. Do not tighten at this time. *Hardware:*

8	LAN506k	1/2" x 1.5" Carriage Bolt
8	LAN3722	1/2" Serrated Flange Nut

Note: Use hardware on head to hang bracket and supplied hardware to connect it to LANSS7B06.



For 2014 & Older Heads:

NOTE: Some headers will have existing hardware that can be used to attach the end mounts.

Refer to Figure 1.5B

1.5 Install end mount supports (LANSS7B07). Do not tighten at this time.

Hardware:

- 4 RED305K
- 4 LAN3718

3/8"x1.25" Carriage Head Bolt 3/8" Serrated Flange Nut



Figure 1.5B

Figure 1.6B

Refer to Figure 1.6B

1.6 Attach the channel (LANSS7B07) to the main bracket (LANSS7B06 & LANSS7B06M) on each side.

Hardware:

- 4 LANB714
- 8 LANFWS57
- 5/8" SAE Flat Washer

5/8" x 3.5" Carriage Bolt

- 4 LAN1626000
- 5/8″ Nyloc Nut
- **1.7** Tighten all hardware on the end mounts.



2. Attach Toolbars to Header Mount

Refer to Figure 2.1

2.1 Attach the rotating toolbar mounts (bar side brackets) (LANSS7B05) to the previously installed head mounts on each side of header. Make sure it is oriented as shown in Figure 2.1.

Hardware:

- 6 LANEWPG 3/4" x 2.50" Clevis Pin
- 6 LANFWS58 3/4" SAE Flat Washer
- 6 LANFOIDJ 1/

1/8"x 1.50" Cotter Pin

Refer to Figure 2.2

2.2 Attach a welded toolbar (LANSS6560) to the outer LANSS7B05 brackets on both sides of header. When the LANSS7B05 brackets are horizontal, the zinc plated tubes in the LANSS6560 should be horizontal and face away from the header.

Hardware:

8 LAN600UBOLT 16 LAN690830 U-Bolt 5/8"x2.6"x3.7" 5/8" Serrated Flange Nut Figure 2.1 Figure 2.2

2. Attach Toolbars to Header Mount

Refer to Figure 2.3

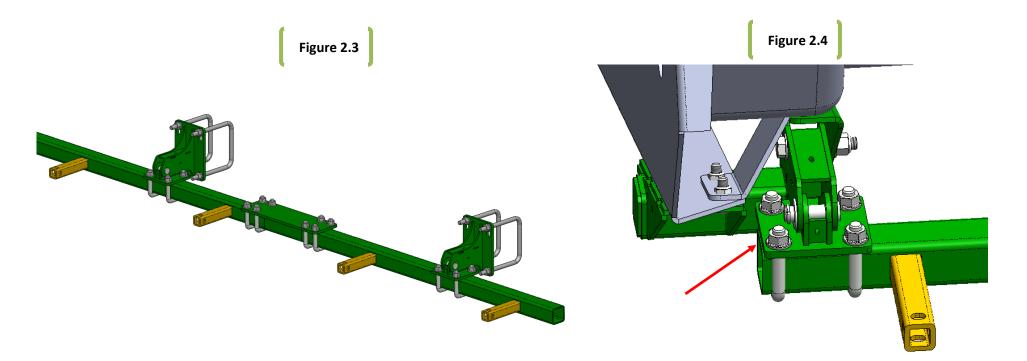
2.3 Attach the toolbar connecting bracket (LANSS650TCB) and welded toolbar (LANSS6580) to the inner side of the LANSS6560 welded toolbar as shown in Figure 2.3. Make sure the zinc plated tubes are spaced 30" apart. Tighten U-Bolts on toolbar first. Make sure bar swings freely, then tighten hardware on header mounts.

NOTE: On both the left and right side of the header, make sure no part of the toolbar extends past the outside edge of the outer rotating toolbar mounts (LANSS7B05)! - See Figure 2.4

Hardware: 12 LAN600UBOLT

24 LAN690830

U-Bolt 5/8"x2.6"x3.7" 5/8" Serrated Flange Nut



3. Mount Hydraulic Cylinders

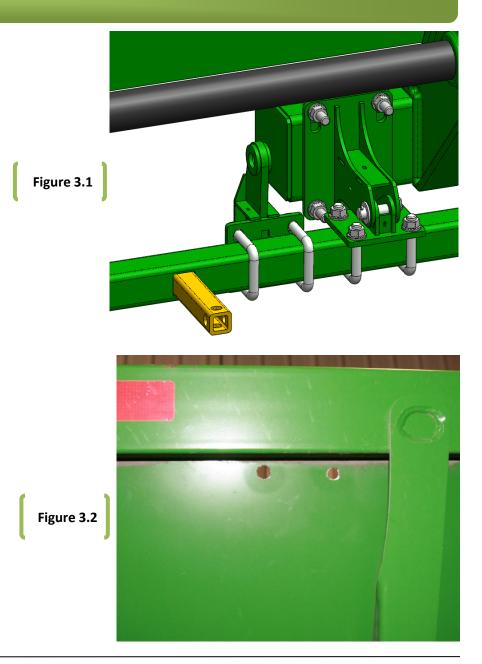
Refer to Figure 3.1 & 3.2.

3.1 Loosely mount the cylinder mount brackets (LANSS7B04) on both sides of the header to the toolbar as shown. One needs to be between the second and third row from the outside of the header (roughly 184" from center of header). The other can be no less than 2 rows and no more than 3 rows away from the outside mount (with a maximum cylinder spacing of 84"). Make sure the hydraulic cylinder will have clearance from the driveshaft at the location you choose.

Hardware:

8 LAN600UBOLT 16 LAN690830

- U-Bolt 5/8″x2.6″x3.7″ 5/8″ Serrated Flange Nut
- **3.2** Mark and drill two holes in line with the LANSS7B04 bracket through the sheet metal using the supplied 3/4" Hole Saw (LANFCJ9M0) on each side of header.



3. Mount Hydraulic Cylinders

Refer to Figure 3.3

3.3 If the top beam of your head is an open channel, slide Cylinder Mount-Head Side Reinforcement (LANSS650HH2) into the channel. This reinforcement simply "squeezes" between the channel, no bolt will go through it. If your head uses a box tube this mount is not needed and can be discarded.

Refer to Figure 3.4

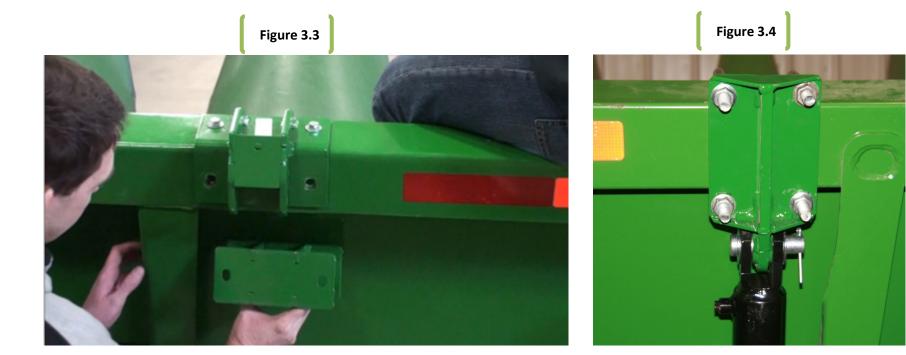
3.4 Attach the cylinder mount (LANSS7B03) to the frame as shown.

Hardware:

16 LAN690830

8 LAN079UBOLT

5/8" Serrated Flange Nut 5" U-Bolt



3. Mount Hydraulic Cylinders

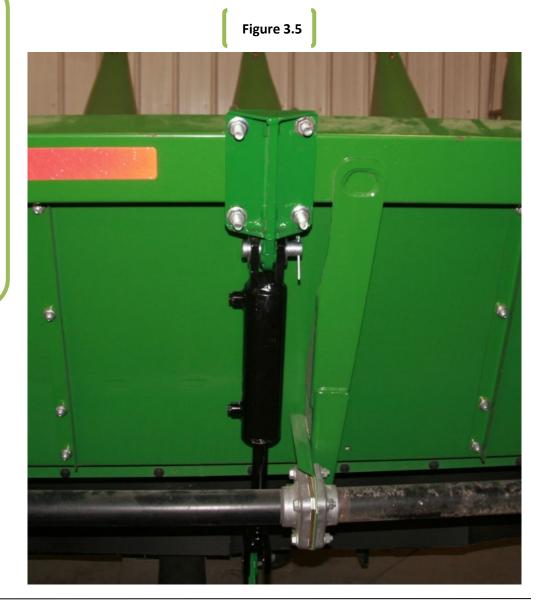
Refer to Figure 3.5

3.5 Install the cylinders (LANHYDCYLC967-A) so that the ports of the two that are on the same side of the header face each other. Make sure the rod end of the cylinders is down. Align top and bottom brackets and tighten all hardware.

Hardware:

- 2 LANFFCJK 1" x 3.00" Clevis Pin
- 2 LANFWS50 1" SAE Flat Washer
- 2 LANFOIFO
- 3/16" x 2.00" Cotter Pin

Note: On 2012 and newer heads the cylinder may require the clevis to be adjusted longer by approximately 1/2". On 2011 and older heads, thread the clevis up onto the cylinder rod approximately 1/2". Verify that the bar can be lifted to the end of the cylinder travel without hitting any part of the head.



4. Install Hydraulics

Refer To Hydraulic Schematic On Next Page

- **4.1** Install 90° hydraulic fittings into the rod end port of the cylinders and straight fittings into the barrel end port.
- **4.2** Install one of the 41" hydraulic hoses to the straight fitting on each hydraulic cylinder and the 55" hydraulic hoses to the 90° hydraulic fittings on each cylinder. Connect the corresponding ports on each side of the header with a tee fitting. Do not tighten at this time.

Refer To Figure 4.1a & 4.1b

- **4.3** Install 9/16" bulk head fittings onto the ball valves on one end and the 11/16" to 9/16" fitting on the other end. Next install a 90° fitting on the side.
- 4.4 Install the ball valves onto the ball valve bracket (LANSS650BVB) using the ball valve spacers (LANSS650BS) to keep the valve assembly away from the header.

Hardware:

2 LAN1618000 3/8" Nylon Insert Lock Nut

Refer To Figures 4.2

- **4.5** Allow enough slack for ease of hose routing: Using the Valve Mount (LANSS650SVM) as a guide, mark holes on the left side of the feeder house opening to drill through back sheet just below the top beam of corn head.
- **4.6** Use the supplied 3/4" hole saw (LANFCJ9M0) to cut out the two marked holes.
- **4.7** Install valve mount to top header beam as shown in Figure 4.1. Tighten hardware.

Hardware:

2

- 4 LAN690830
 - 5/8" Serrated Flange Nut LAN079UBOLT 5" U-Bolt
- **4.8** Install hydraulic valve to mount as shown in figure 4.2. Tighten all hardware.

Hardware:

- 2 REDODTT
- 3/8" Top Lock Nut

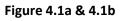
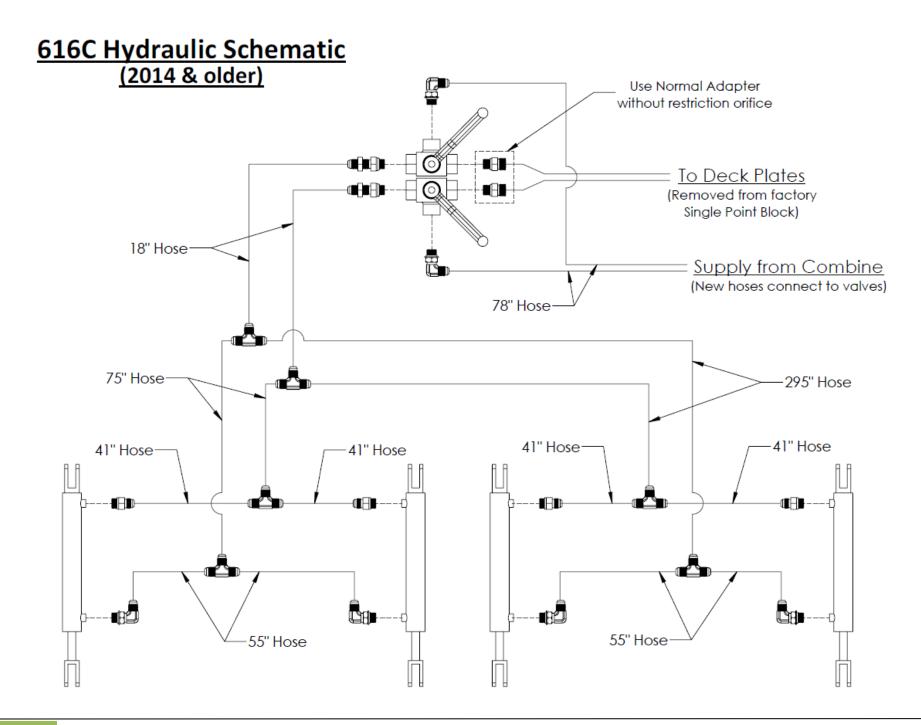
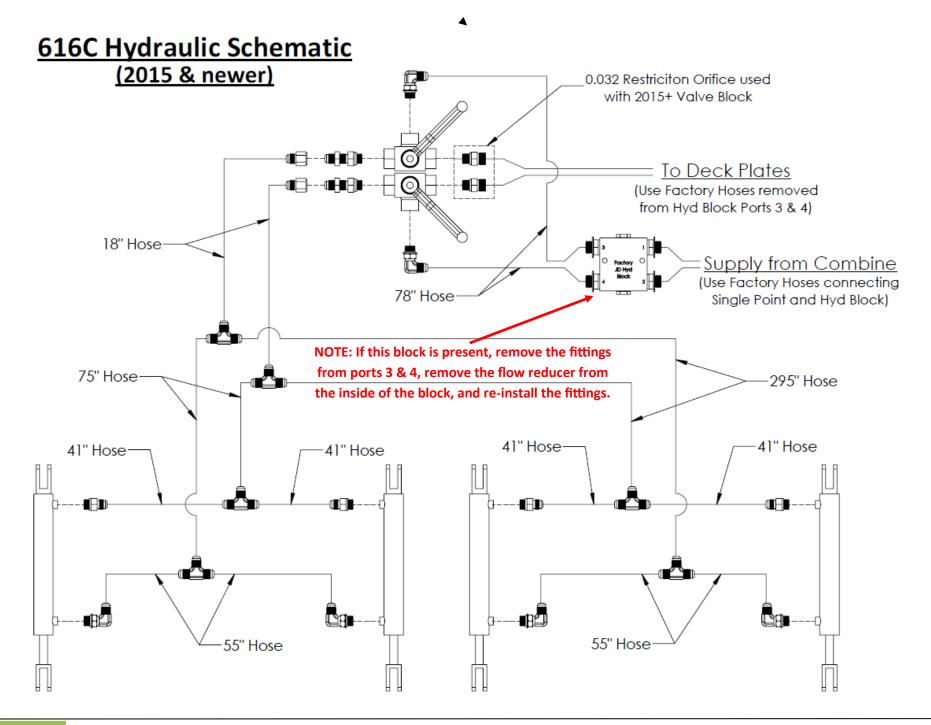




Figure 4.2







4. Install Hydraulics

Refer To Hydraulic Schematic On Previous Page

Refer to Figure 4.3

- **4.9** Use the 75" hoses to connect the tee fittings on the left side cylinders to the 18" hoses via two more tee fittings. Attach the 18" hoses to the bulkhead fittings
- **4.10** Route the two 295" hydraulic hoses from the tee fittings on the left side of the header through the opening underneath the feeder house opening of the corn head to the tee fittings on the right side of the header.
- **4.11** Attach the two 295" hoses to the tee fittings on the right side of the header as shown. Secure hoses with supplied Zip Ties (LAN44302) as needed.
- 4.12 Tighten hydraulic fittings and hose ends indexing them as to accommodate the best hose routing.

Figure 4.3

NOTE:

The selector valves allows the user to select between adjusting stalk stompers or adjusting the deck plates. The operator uses the deck plate adjustment switch for both functions. Once the head is removed from the header cart and in the field, lower the stalk stompers and move the selector valve to the deck plate position. Readjustment of the stalk stompers within the field should not be necessary.



4. Install Hydraulics

Refer To Hydraulic Schematic On Page 18

- **4.13** Supply from the combine will go through either the factory hydraulic block installed on the header, or directly into the supplied 78" hoses and onto the middle port of the supplied handle valves.
- 4.14 Attach the hoses going to the deck plates to the 11/16" Male ORFS x 9/16" Male ORB fittings on one end of the handle valves.
- **4.15** Index hoses and fittings as to allow for the best routing. Tighten all hoses and fittings.



Figure 4.3

NOTE:

The above instructions should maintain the direction of the deck plate adjustment switch. If this is not the case, swap the 78" hoses that attach to the 90° fittings installed in center valve ports.

If you wish the stalk stompers to operate in the opposite direction with the switch, swap the hoses that attach to the left hand side of the hydraulic valves.

5. Install Center Stalk Stompers

Refer to Figure 5.1

5.1 Attach the brackets (LANSS750FE) to the bottom of the header angle bracket on each side of the feeder house opening. A shim plate (LANSS700I) is provided to lower the toolbar if necessary.

Hardware:

4	LANF1ERQ	1/2" x 2.0" Carriage Bolt
4	LAN3722	1/2" Serrated Flange Nut

Refer to Figure 5.2

2011 & older heads utilize the back center holes on the mount (LAN750FE) 2012 & newer heads utilize the back outer holes on the mount (LAN750FE). Offset the brackets towards the center of the head.

Figure 5.1



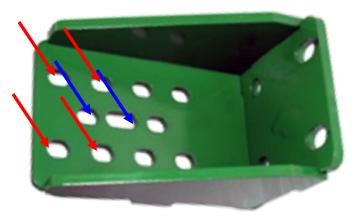


Figure 5.2

6. Install Center Stalk Stompers

Refer to Figure 6.3

NOTE: For 2011 and older CHOPPING corn heads, remove chopping curtains under feeder house. Reinstall them opposite (backwards) of how they were installed from the factory.

6.2 With the welded tubes facing towards the cab of the combine, mount the tool bar (LANSS6534) to the front of the brackets (LANSS650FE) that were previously installed. Center the bar between the two outside mounts. Tighten the carriage bolts and all the U-bolts on the tool bar at this time.

Hardware:

- 4 LAN690830 5/8" Serrated Flange Nut
- 4 LAN600UBOLT 2.5" U-Bolt

Figure 6.3



6. Install Center Stalk Stompers

Refer to Figure 6.4

6.3 Slide the Lankota Stalk Stompers onto the mounts and secure with provided Hitch Pin (LANSS704). Lankota Stalk Stompers can be flipped upside down on the quick disconnect mounts if necessary for clearance during transport.

NOTE:

For any Stalk Stomper shoes that will not be removed frequently, it is recommended that you securely bolt the shoes to the mounts using the supplied 1/2" bolt (LANFNHVK) and lock nut (LANFNXC1).





Stalk Stomper Disclaimer

Stalk Stomper Disclaimer

The most effective use of the Lankota Stalk Stomper[®] is achieved by adjusting the stomper pad so that when the corn head is at its normal cutting height, the pad of the shoe is 1" above the ground. Over compression of the spring can shorten the life of the stomper spring, increase wear on the poly liner, and may result in undue damage NOT covered by *Lankota's Limited Warranty*.

