

LANBXE10222

Installation Instructions

Lankota Upgrade Kit for JD® 70 Series Lateral Tilt & Fore/Aft Feederhouse

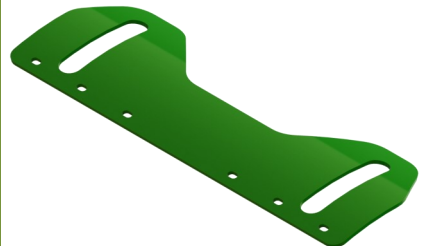

LANKOTA®

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

Numerical Parts List

Part Numbers	Description	Quantity
LANAXE20788	Fore/Aft Tilt Frame	1
LANAXE12973	Lateral Tilt Frame	1
LANH233433	Hydraulic Cylinder Weld-on Gusset	2
LANHXE33585	Bottom Torque Plate	1
LAN56930	3/4 x 2.75" Cylinder Pin Replacement	2
LANH235756	Toothed Washer Replacement	2
LANH237013	Toothed Plate Replacement	2
LANAH218299	Isolator Seal Replacement	2
LANH220898	Weatherstrip Seal Replacement	2
LANH237038	Feederhouse Frame Seal Replacement	2
LANH240181	Left Lower Wear Pad	1
LANH240213	Right Lower Wear Pad	1
LANH149461	Upper Wear Pad	2

Pictorial Parts List

			
LANAXE20788 (1)	LANAXE12973 (1)	LANH233433 (2)	LANHXE33585 (1)
			
LAN56930 (2)	LANH235756 (2)	LANH237013 (2)	LANAH218299 (2)
			
LANH220898 (2)	LANH237038 (2)	LANH240181 & LANH240213 (1) of each	LANH149461 (2)

Preparation

1. Detach any head from the combine.
2. Raise the feeder house up 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.
5. Remove the plastic shields on both sides of feederhouse and set to the side. (Replace them when finished.)

Note: Many of the parts and hardware on the combine will be removed and reinstalled later. It is important to keep track of where they come from and how to reassemble them.

Warranty Notice:

All parts included in this kit must be installed per the instructions. Any misuse or lack of use of any or all parts will result in the kit not performing as designed. Any damages incurred by improper installation will not be covered by the Lankota limited warranty.

1. Removing the Old Frames

Refer to Figures 1 & 2

1. Remove front plastic deflector shields. Keep parts and hardware for reinstallation.

Refer to Figures 3 & 4

2. Remove top and bottom torque plates. Keep all hardware and top plates for reinstallation. Discard bottom plates.



Figure 1



Figure 2



Figure 3



Figure 4

Removing the Old Frames

Refer to Figure 5

3. Remove top rubber flap and pipe. Keep for reinstallation.

Refer to Figures 6 & 7

4. Remove the bolt and pin from the rod end of the tilt cylinder as shown. Keep the hardware for reinstall. (a replacement pin is provided)



Figure 5



Figure 6



Figure 7

Removing the Old Frames

Refer to Figure 8

5. Loosen the 8 bolts holding the lateral tilt frame on the tilt beam.

Refer to Figures 9 & 10

6. Attach a suitable lifting devise. Remove the bolts and keep for reinstall. Carefully remove the tilt frame.



Figure 8



Figure 9



Figure 10

Removing the Old Frames



Figure 11

Refer to Figure 11

7. Remove the remaining bolt and pin from the head end of the tilt cylinder as shown. Keep the hardware for reinstall. (a replacement pin is provided)

Refer to Figure 12

8. Remove the bolts holding the cylinder hoses in place as shown. Move the cylinder and hose out of the way. Keep the hardware for reinstall.

Refer to Figure 13

9. Remove the tilt sensor cable from its holding latch and move out of way like the cylinder.

Figure 13

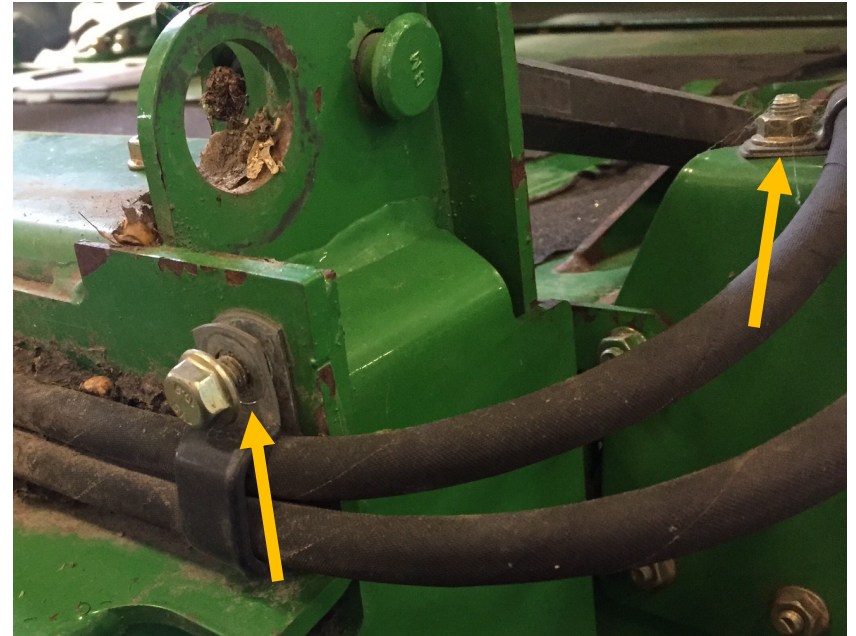


Figure 12



Removing the Old Frames

Refer to Figure 14

10. Remove the bolts and strap connecting the rubber sheet to the Fore/Aft Frame. Keep the parts and hardware for reinstall.

Refer to Figure 15

11. Remove and discard the wear pads from the Fore/Aft Frame.



Figure 14



Figure 15

Removing the Old Frames



Figure 16

Refer to Figure 16

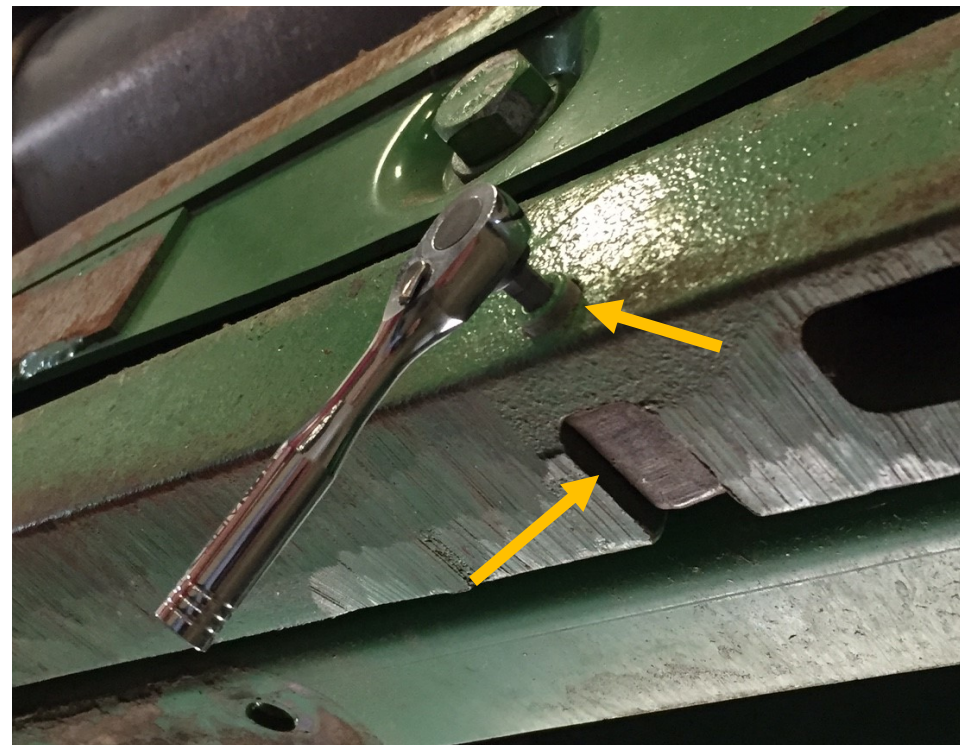
12. Remove the bolt for connecting the locking pin cable.

Refer to Figure 17

13. Remove the socket screw and holder keeping the locking pin cable in place. Keep them for reinstall.

14. Remove the locking pin cable from the tilt beam.

Figure 17



Removing the Old Frames

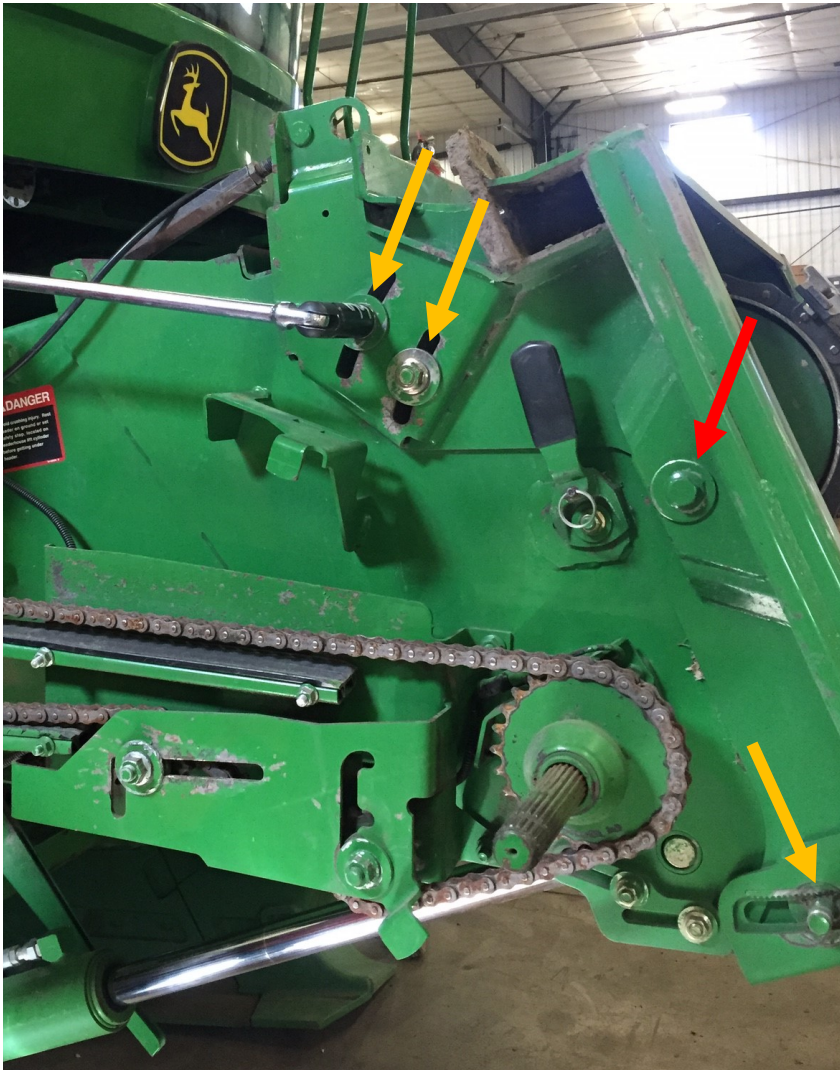


Figure 18

Refer to Figure 18

15. Loosen and remove the bolts marked with **yellow**. Only loosen the bolt marked **red**. Repeat on other side. Keep all hardware for reinstallation.
16. Shorten the turn-buckle on both sides so the frame is tipped back the maximum amount.

Refer to Figure 19

17. Remove the retaining bolts from the back of the tilt beam on both sides. Keep hardware for reinstallation.



Figure 19

Removing the Old Frames



Figure 20

Refer to Figures 20 & 21

18. Remove the bolts holding the pivot bushing in place. Keep hardware and plate for reinstallation.
19. Support the tilt beam with a suitable lifting device.
20. Insert an M24 bolt into the bushing either from the back to pull or from the front to hit it back.
21. Remove the pivot bushing and tilt beam.



Figure 21

Removing the Old Frames

Refer to Figure 22

22. Remove and discard the worn wear pads.

Refer to Figure 23

23. Loosen and disconnect the turnbuckles from the F/A frame.

24. Support the F/A frame with a suitable lifting device.



Figure 22

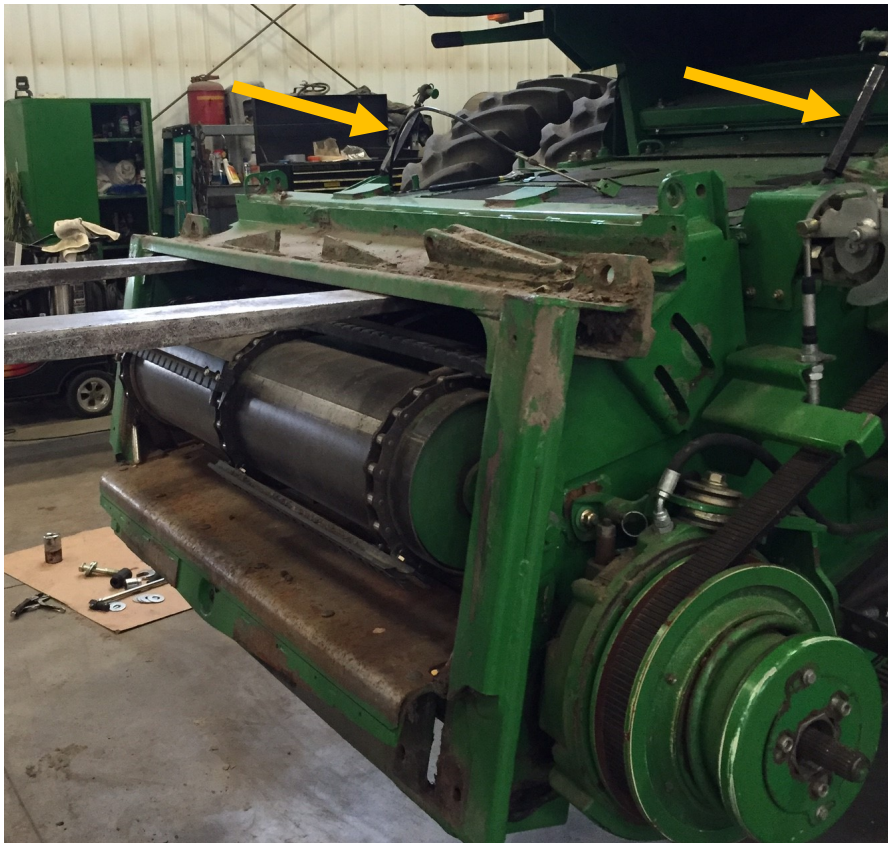


Figure 23

Removing the Old Frames



Figure 24

Refer to Figure 24

25. Remove the pivot bolt and bushing from both sides and save for reinstallation.

Refer to Figure 25

26. Remove the Fore/Aft frame.



Figure 25

Removing the Old Frames

Refer to Figure 26

27. Remove the carriage bolts and floor plate from the F/A frame. Set the bolts and plate aside for reinstall.
28. Remove the bolts and side seals on both sides of the feederhouse. Keep the hardware for reinstallation, discard the seals.

Figure 26



2. Transition



Figure 27

Refer to Figure 27

1. Remove isolator seals from the back side of the previously removed F/A frame. Clean, replace with LANH218299 and install in the new frame.

Refer to Figure 28

2. Remove the bolts and weatherstrip from both sides of the previously removed Tilt frame. Clean, replace weatherstrip with LANH220898 and install in the new tilt frame.



Figure 28

Transition

Refer to Figures 29 & 30

3. Install the gussets (LANH233433) under the feederhouse as shown and temporarily retain. Outline the gussets, remove them and remove paint within 2 inches of the outlines.
4. Replace gussets and weld in place as shown.
5. Allow to cool, then prime and paint to prevent rusting.

Figure 29

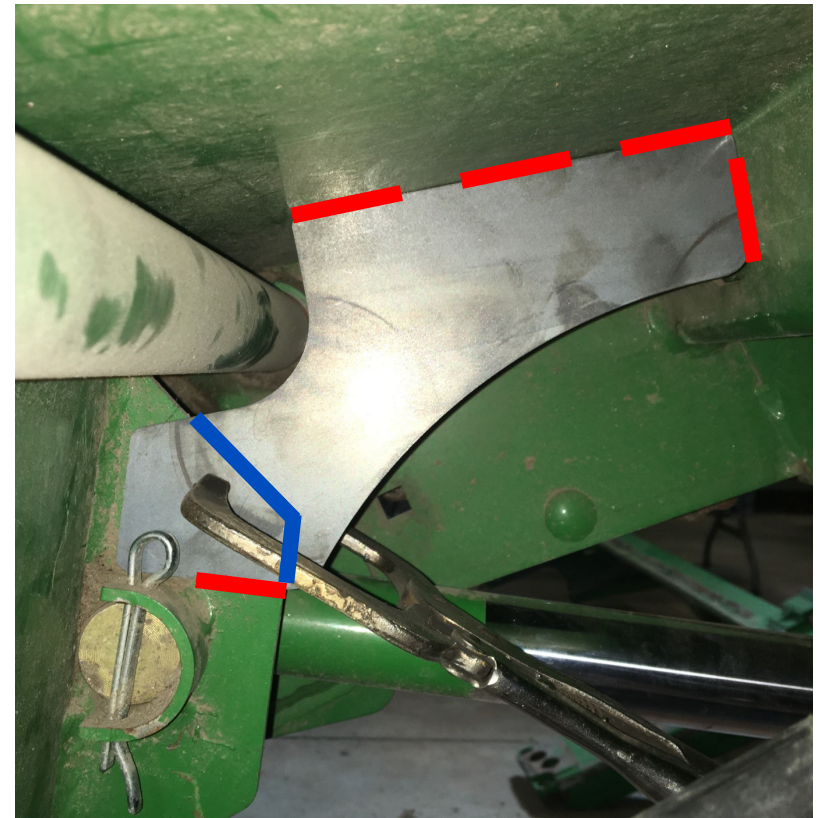


Figure 30

Welding Legend

- Red — weld on this side
- Blue — weld on opposite side

3. Installing the New Frames

Refer to Figure 1

1. Install the new Fore/Aft frame (LANAXE20788).

Refer to Figure 2

2. Reinstall the center pivot bolt, bushing and washer and the turn-buckle on both sides. Turn the buckles so the frame is tipped backward.



Figure 1

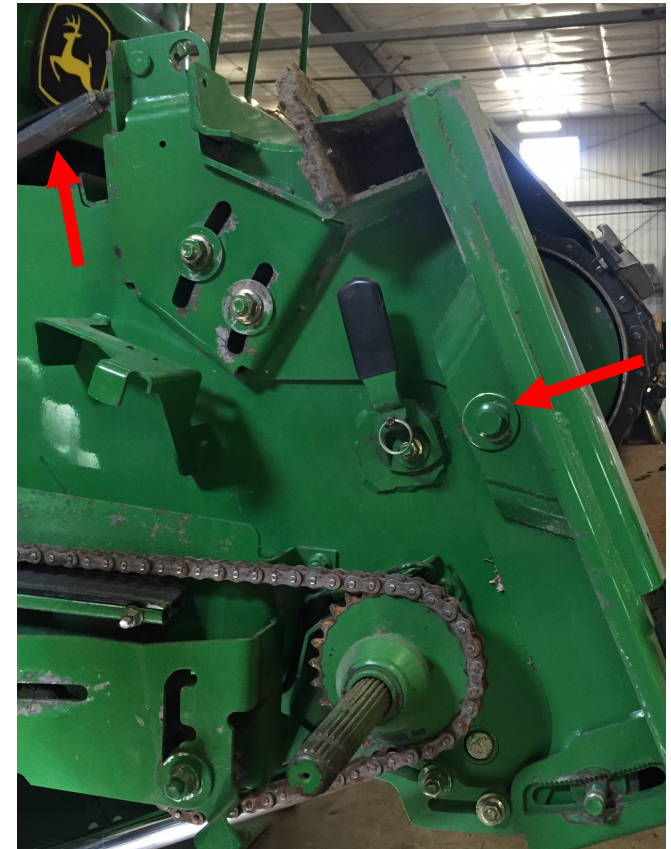


Figure 2

Installing the New Frames

Refer to Figures 3 & 4

3. Install the side floor seal (LANH237038); insert them into the slots in the F/A frame. Retain with previously removed hardware.
4. Reinstall the floor plate and retain with the original carriage bolts and nuts.



Figure 3



Figure 4

Installing the New Frames

Refer to Figure 5

6. Install the top seal that joins the feeder house and F/A frame.

Refer to Figures 6 & 7

7. Tip the frame back.
8. Install the new top and bottom wear plates. It may be necessary to hold the top plates in with tape.



Figure 5

Figure 6



Figure 7



Installing the New Frames

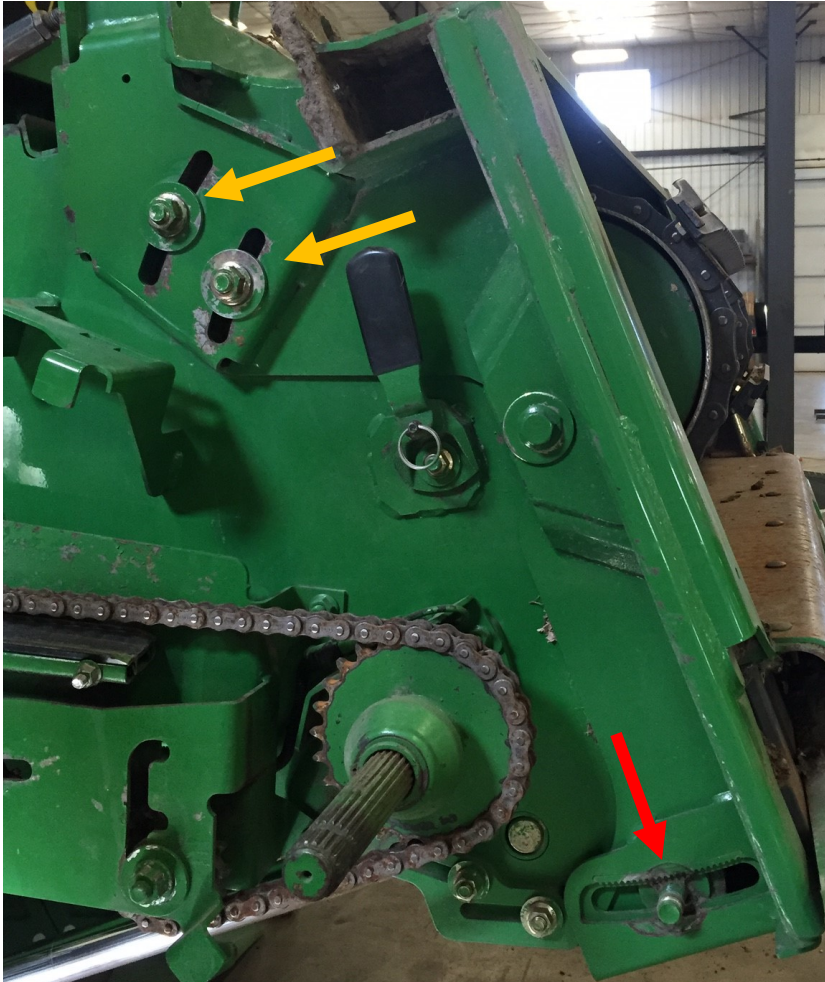


Figure 8

Refer to Figure 8

9. Install the rest of the F/A frame mounting hardware. Leave it all loose so the frame may move later. (Do NOT install the new tooth bar or toothed washer at this time.)

Refer to Figure 9

10. Reinstall tilt beam and insert pivot bushing.



Figure 9

Installing the New Frames



Note: This picture shows the center bolt in backwards.

Figure 10

Refer to Figure 10

11. Reinstall the plate and bolts that hold the pivot bushing in.

Refer to Figure 11

12. Reinstall tilt beam retainers bolts on both sides.



Figure 11

Installing the New Frames

Refer to Figure 12

13. Reinstall the cable for engaging the header locking pins.

Refer to Figure 13

14. Reinstall the previously removed cast block that keeps the cable in place.

Refer to Figure 14

15. Install new bottom torque plate (LANHXE33585) with original hardware.



Figure 12

Figure 14

Figure 13



Installing the New Frames



Figure 15

Refer to Figures 15 & 16

16. Reinstall the tilt cylinder. Install the new pin (LAN56930) through the head end and F/A frame. Then install the bolt and washer that retains the pin.

17. Reconnect the hydraulic hoses to the F/A frame and feeder house as shown.

Refer to Figure 17

18. Reconnect the tilt sensor cable in the fixed mount.

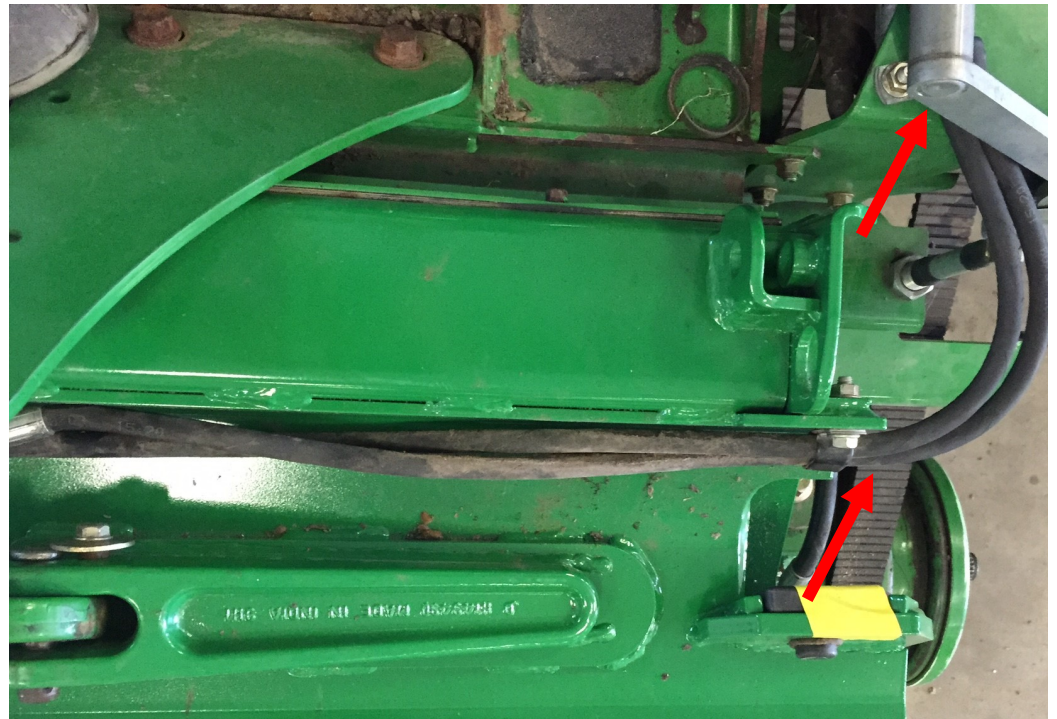


Figure 16

Figure 17



Installing the New Frames

Refer to Figure 18

19. Reinstall the tilt frame using a suitable lifting device. Line one side up with the tilt beam and insert 4 of the bolts that were removed previously. Leave them loose.

Refer to Figure 19

20. Connect the cylinder to the new tilt frame with LAN56930. Line them up by either moving the tilt frame or running the cylinder with the combine.
21. Connect the tilt sensor cable and retain the cylinder pin as shown.
22. Line up and install the bolts on the other side of the tilt frame and tilt beam.



Figure 18



Figure 19

Installing the New Frames

Refer to Figure 20

23. Adjust the turnbuckles until the F/A frame is set as desired. Lock in place with jam nut.

Refer to Figure 21

24. Insert the new tooth bar and washer (LANH237013 & LANH235756) as well as the original nut and bolt on both sides. Make sure the teeth of washer and plate engage one another.

25. Tighten these bolts and all other hardware.



Figure 20



Figure 21

Installing the New Frames



Figure 22

Refer to Figure 22

26. Reinstall the top torque plates and tighten.

Refer to Figure 23

27. Reinstall the rubber tilt flap.

Figure 23



Installing the New Frames



Figure 24



Figure 25

Refer to Figures 24 & 25

28. Draw a line across the top of the plastic deflector from the existing notch to the end. Cut along this line and repeat on the opposite side.

Note: if a replacement deflector is needed use Part# HXE13354 at your local John Deere dealer.

Refer to Figure 26

29. Reinstall all the plastic deflectors and the metal plates behind them as shown.



Figure 26

Installing the New Frames

Refer to Figure 27

29. Reinstall all the deflector hardware as shown and tighten.
30. Do a final check to make sure all hardware has been properly tightened.
31. Test the tilt function of the feederhouse and confirm there are no interference issues to address.

For further technical assistance,
Call Lankota Inc. at:
1-866-526-5682

Figure 27

