# LANAP200 Installation Instructions

Adapts late model 900 Series headers to new John Deere® drive shaft technology

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

# Numerical Parts List

Part Numbers	Description	Qty	
LAN935-27600	D550 Drive Shaft	2	
LAN102	Clutch Adapter Hex Shaft—C400	1	
LAN101A	Backing Ring for Sprocket Adapter	1	
LAN1090	Spacer for LAN102	1	
LAN104	Platform Hanger Bearing Mount	2	
LAN105	Bearing Flange	4	
LAN207KRRB12	1-1/8"Hex Bearing	2	
LAN108	PTO Support Bracket	2	
LANAP200BH	Bag of Hardware	1	
LAM22A32	1/2"-13 x 1.50" Gr. 5 Hex Bolt	4	
LAN3722	1/2" Serrated Flange Nut	4	
LAN18A	3/8"-16 x 1.0" Carriage Bolt	6	
LAN3718	3/8" Serrated Flange Nut	6	

LAN935-27600 (2)	LAN102 (1)	LAN101A (1)	LAN1090 (1)
LAN104 (2)	LAN105 (4)	LAN207KRRB12 (2)	LAN108 (2)
LAN22A32 (4)	<b>LAN3722 (4)</b>	LAN18A (6)	LAN3718 (6)

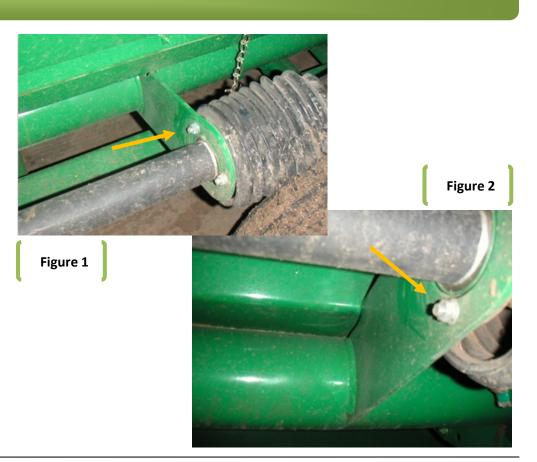
# Preparation

- 1. Attach desired header to the combine. Lock the head to the combine.
- 2. Make sure the header is unfolded completely, if necessary.
- 3. Raise the head off the ground and lower the safety stop on the feeder house cylinder.
- 4. Set the parking brake on the combine.
- 5. Turn off the combine engine and remove the key.

# Kit Installation

#### Refer to Figures 1 & 2

- 1. Remove chain sprockets and protective tubing from the left and right jackshafts on the head.
- 2. Remove slip clutch assembly from the right side of the head. Attach the header to the combine.
- 3. Measure from the outer end of the combine drive shaft on the left side and place a mark at 34 inches on the jackshaft of the head.
- 4. Cut jackshaft at the measured mark. (Utilizing a chop saw clamped onto the jackshaft eliminates the need to remove the jackshaft from the header.)
- Install additional hanger bearing by placing the hex bearing (LAN207KRRB12) between two bearing flanges (LAN105) and mount it to the hanger bearing support (LAN104) using three bolts (LAN18A) and nuts (LAN3718). Install an assembled hanger bearing onto the header jackshaft.
- **Note:** Always bolt hex bearing assembly to the feeder house side of the hanger bearing support (LAN104) allowing for bearing removal or replacement if needed.



#### Refer to Figure 3

- 6. Install hanger bearing as close to where the driveshaft will connect to jackshaft as possible. Three inches of jackshaft protruding out from bearing is ideal.
- 7. Measure the length of the bare shaft. Modify protective plastic safety tube to accommodate the new length of shaft.
- Remove the bearing and support. Reinstall the protective plastic tube and hanger bearing. Check all components for the proper fit.
  \*Note any binding, rubbing or bearing misalignment.
- 9. Position bearing mount perpendicular with the main frame tube. Weld half moon end of the support mount to the five inch main frame tube on the bottom of the headers as shown in Figure 3.
- 10. Clean and paint the area.

#### **Refer to Figure 4**

- 11. Temporarily install the drive shaft (LAN935-27600) by sliding it 2-1/2" onto the jackshaft. Utilize a small hand grinder to mark where the groove needs to be ground into the jackshaft for the half inch bolt that secures the driveshaft to the hex shaft.
- 12. Reassemble and tighten all components. Check and make sure all safety shields are in place.



Figure 3

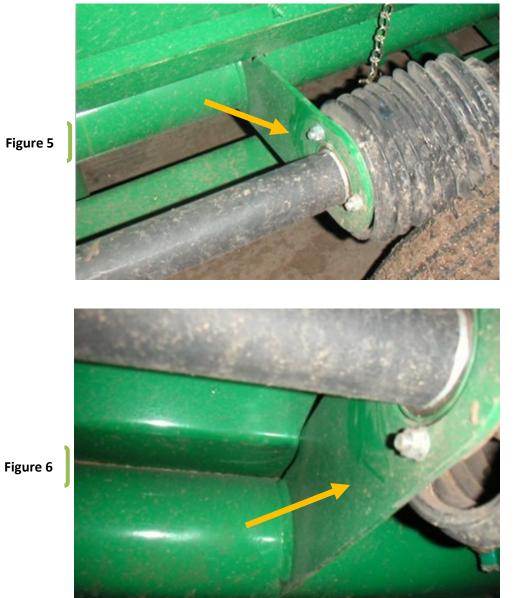
Figure 4



#### **Refer to Figures 5 & 6**

- 13. The clutch, protective bell shield and protective tube should already be removed from jackshafts on the right side of the header.
- 14. Measure from the outer end of the combine drive shaft on the right side and place a mark at 38 inches on the jackshaft of the head.
- 15. Cut jackshaft at the measured mark. (Utilizing a chop saw clamped onto the jackshaft eliminates the need to remove the jackshaft from the header.)
- 16. Install additional hanger bearing by placing the hex bearing (LAN207KRRB12) between two bearing flanges (LAN105) and mount it to the hanger bearing support (LAN104) using three bolts (LAN18A) and three nuts (LAN3718). Install assembled hanger bearing on the header jackshaft.
- Note: Always bolt hex bearing assembly to the feeder house side of the hanger bearing support (LAN104) allowing for bearing removal or replacement if needed.

Figure 5



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#### **Refer to Figure 7**

- 17. Slide the clutch assembly onto the shaft until the jackshaft is flush with the sprocket on the clutch assembly.
- Bolt the hex shaft adapter (LAN102) and backing ring (LAN 101A) to the clutch assembly sprocket using four bolts (LAN22A32) and lock nuts (LAN3722). Hand tighten at this time.

**Note:** Bolts fit into the sprocket teeth with flange lock nuts on the sprocket side.

- 19. Temporarily install the drive shaft (LAN394306) on the shaft adapter and connect to the combine.
- 20. Check all components for proper fit. Do not tighten.



19. Measure desired lengths to reinstall protective jackshaft cover tubes and clutch bell shield.

Note: Lengths differ from size of head.

19. Remove drive shaft, clutch adapter, slip clutch and bearing holder.

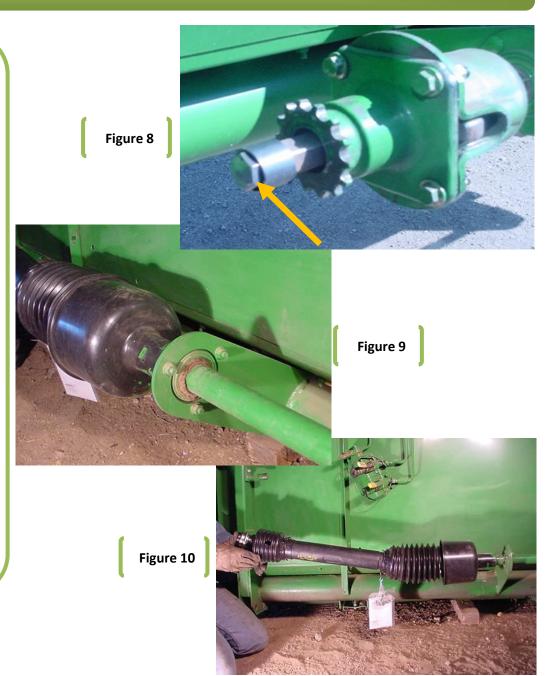
20. Install modified protective tubes and bell shield.

#### **Refer to Figure 8**

- 21. Reinstall hanger bearing kit. Always bolt Hex Bearing (LAN207KRRB12) to feeder house side of hanger bearing support (LAN104) so bearing removal or replacement is possible.
- 22. Reinstall header slip clutch. Slide the retainer (LAN1090) over the jackshaft so a quarter of an inch of jackshaft protrudes.
- Note: All shielding and components must be in place before welding pipe onto the jackshaft.
  - 23. Tack weld the retainer (LAN1090) to the jackshaft to keep clutch from sliding off.
  - 24. Reinstall the hex shaft adapter (LAN102) & (LAN101A) and tighten.

#### Refer to Figures 9 & 10

- 25. Reinstall the driveshaft to the clutch adapter. A groove is provided in the clutch adapter jackshaft for the half inch locking bolt. Tighten hardware.
- 26. Inspect thoroughly to make sure all shielding is in place (plastic tube and clutch bell).
- 27. Align the header shaft.
- 28. Position bearing bracket perpendicular to the main frame tube. Weld half-moon end support bracket to the five inch main frame tube on the bottom of the header.
- 29. Clean and paint area.



#### **Refer to Figure 11**

- 30. Position the PTO support (LAN108) approximately 10 ½" inches down from the header rail on the outside of center vertical sub frame.
- 31. Make sure the PTO shaft slides on and off the PTO support before welding to sub frame. Repeat for left side of header.
- 32. Proper shielding is the responsibility of the installer or enduser. Drive shaft safety handbook is included with all kits for your review and protection.

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Figure 11

For further technical assistance,

Call Lankota Inc. at:

1-866-526-5682