

# LANAUGHURK

## Installation Instructions

Auger Extensions for High Unload Rate (HUR) John Deere Combines

# LANKOTA®

**270 West Park Avenue**

**Huron, SD 57350**

**866-526-5682**

# Numerical Parts List

<b>Part Numbers</b>	<b>Description</b>	<b>Qty</b>
LANAUGHUR-B	Bearing Hanger	1
LANAUGHUR-C	Access Cover	1
LANAUGHUR-F	Auger Flighting Extension Weldment	1
LANAUGHUR-T1	Saddle Tube	1
LANAUGHUR-T2	Extension Tube	1
LANGS20	Grain Saver Door Weldment	1
LANGS24	Spring Arm	1
LANAUG295	Spring Retainer Band	2
LAN207KRRB12	Bearing	1
LAN105	Bearing Flange	2
LANAUGHUR-S	Auger Spacer	5
LANAUGHUR-JIG	Drill Jig for Auger Flighting Extension	1
<b>LANAUGHURKBH</b>	<b>Bag of Hardware</b>	<b>1</b>
RED305K	3/8"-16 x 1-1/4" Carriage Bolt	13
LAN3718	3/8"-16 Serrated Lock Nut	20
LANH217334	Spring	2
LAN18A	3/8"-16 x 1" Carriage Bolt	5
LAN1618000	3/8"-16 Nylon Lock Nut	2
LANF011G	1/2"-13 x 4-1/2" Full Thread Hex Bolt	1
LANF-HN-0.500C	1/2"-13 Hex Nut	1
REDWL55	1/2" Lock Washer	1
REDB206	5/16"-18 x 1-1/2" Hex Bolt	1
LANF-HN-0.313C	5/16"-18 Hex Nut	1
LANFGCMN	5/16" Bolt Retainer Clip	9
LANFS105	1/4" x 1-1/4" Socket Head Screw	1
LANFGXWV	5/16" Drill Bit	1

**NOTE:** One extra spring is included for replacement if necessary

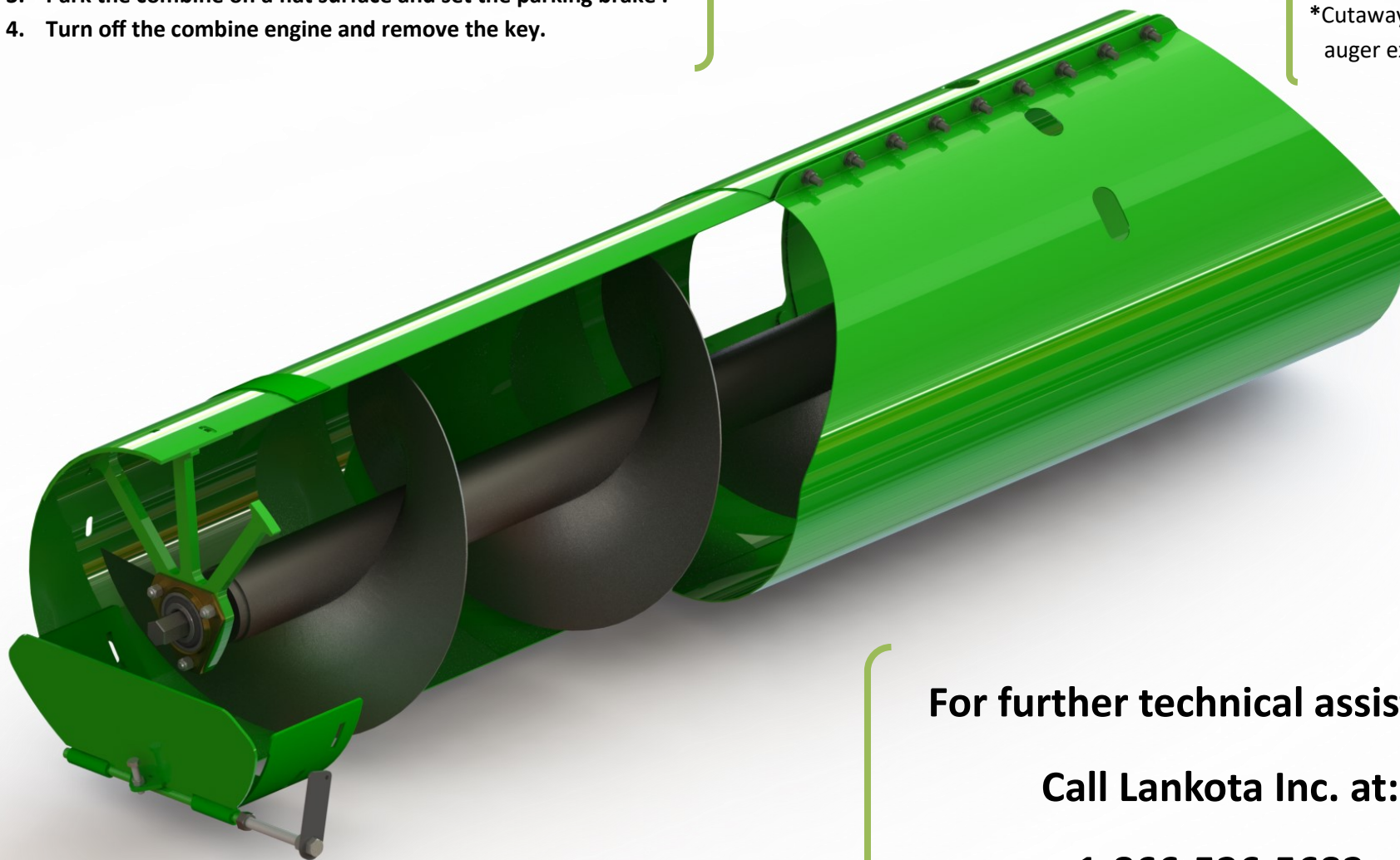
# Pictorial Parts List

						
LANGS20 (1)	LANAUG295 (2)	LANGS24 (1)	LANAUGHUR-T1 (1)	LANAUGHUR-T2 (1)	LAN105 (2)	
						
LANAUGHUR-B (1)	LANAUGHUR-C (1)	LANAUGHUR-F (1)	LANH217334 (1)	LANFGCMN(9)	LAN207KRRB12 (1)	LANFGXWV (1)
						
LAN3718 (20)	RED305K (13)	LAN1618000 (2)	LAN18A (5)	REDB206 (1)	LANF-HN-0.313C (1)	LANH217334 (1) (for a spare)
						
LANF-HN-0.500C (1)	LANF011G (1)	REDWL55 (1)	LANAUGHUR-S (5)	LANFS105 (1)	LANAUGHUR-JIG (1)	

# Preparation

1. Run the auger empty.
2. Fold the auger down
3. Park the combine on a flat surface and set the parking brake .
4. Turn off the combine engine and remove the key.

\*Cutaway picture of  
auger extension kit



**For further technical assistance,**

**Call Lankota Inc. at:**

**1-866-526-5682**



# Auger Extension Kit

## Refer to Figure 1

1. Remove the plastic spout and factory grain saver door from the existing auger tube.
2. Retain all hardware for re-use later in the installation.
3. The factory bearing hanger and its hardware should remain fastened to the existing auger tube.

## Refer to Figures 2 & 3

4. Evaluate the Flighting Extension Weldment (LANAUGHUR-F) and determine how it should be timed with the main auger.

**Timing auger extension:** The new flighting should trail the existing flighting by 90 – 180 degrees.

**Note:** See Figure 2 for an example of flighting trailing by 120 degrees.

5. Determine and take note of which (2) faces of the main auger hex shaft the retaining bolt will pass through, then remove and set the flighting aside.



Figure 1



Figure 2

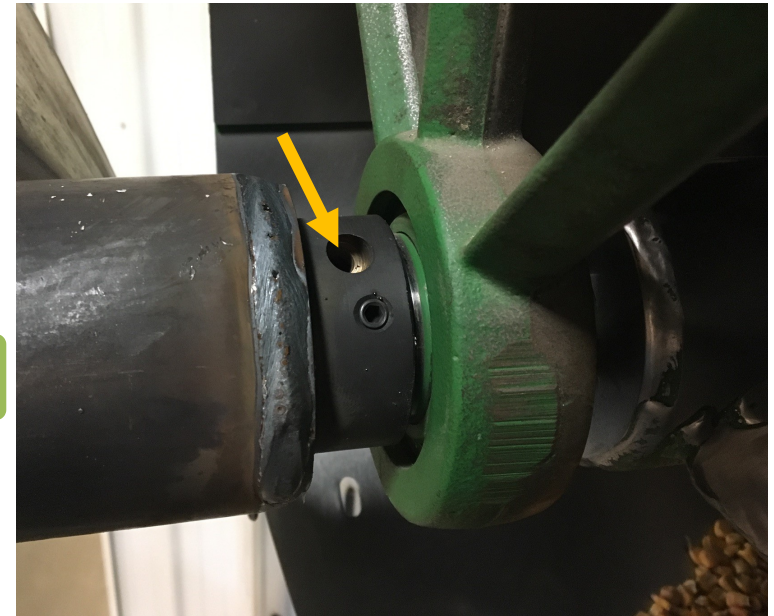


Figure 3

# Auger Extension Kit



Figure 4

## Refer to Figure 4

6. Remove the set screw from the flighting weldment hub and insert in the drill jig.
7. Install the jig onto the main auger hex shaft with the through-hole meeting the previously determined faces that will be drilled.
8. Slide the jig up to the bearing and tighten the set screw.

## Refer to Figures 5 & 6

9. Drill out the shaft with the provided 5/16" drill bit.
  - Go very slow to begin.
  - Rotating the auger to drill through the auger tube cutout is required.
  - Drilling from both sides is recommended to minimize wandering.



Figure 5



Figure 6



# Auger Extension Kit

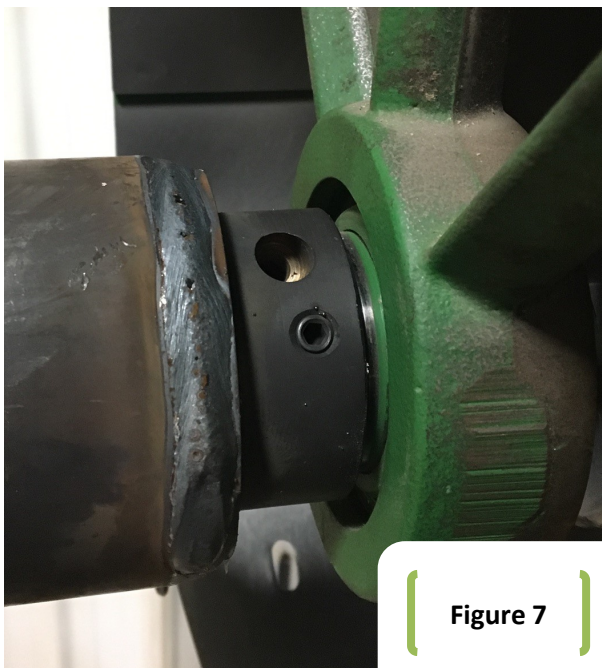


Figure 7

## Refer to Figures 7 & 8

10. Remove the drill jig and reinstall the set screw in the flying hub.
11. Attach the flying extension weldment (LANAUGHUR-F) to the hex shaft of the existing auger, aligning the freshly drilled hole and weldment hub in the process.
12. Install the 1/4" x 1.25" socket head bolt (LANFS105) into the hub and through the drilled channel of the hex shaft.
13. Tighten the bolt and the set screw.

## Refer to Figure 9

14. Slide the auger Saddle Tube (LANAUGHUR-T1) over the flying extension and existing auger tube. Temporarily secure with one LAN305K carriage bolt and serrated lock nut.

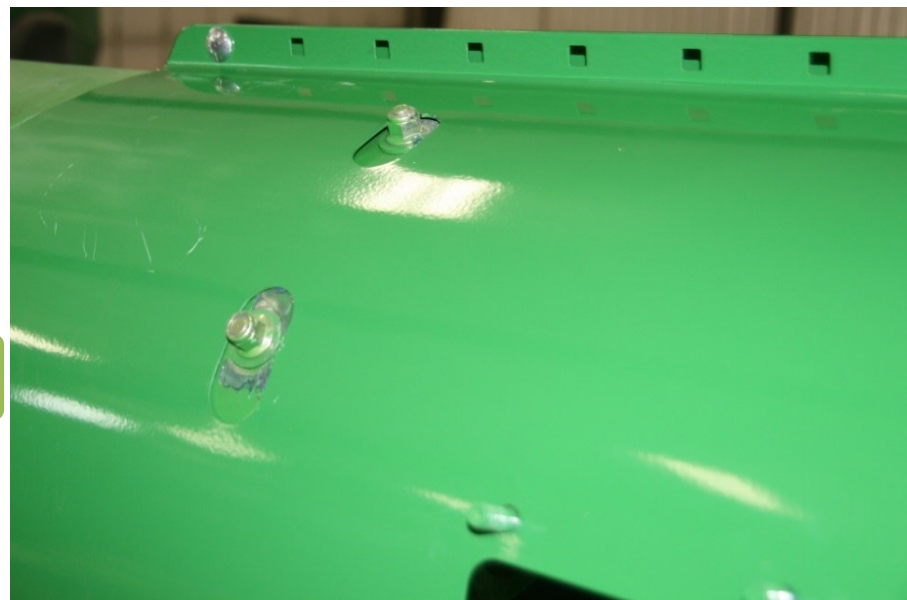
**Note:** In Figure 9 there are slots for the existing bearing hanger bolts to fit through on each side.

15. Slide the auger Extension Tube (LANAUGHUR-T2) into the auger saddle tube and align with the access door. Install an additional eight LAN305K and serrated lock nuts along the top rib of auger saddle tube. Tighten all hardware.



Figure 8

Figure 9



# Auger Extension Kit

## Refer to Figures 10 & 11

- Slide the provided auger spacers (LANAUGHUR-S) over the hex shaft on the provided auger. Make sure enough of them are installed so that they contact the inner race of the bearing once installed. Install the bearing hanger (LANAUGHUR-B) inside the auger extension tube using four of the carriage bolts (RED305K) & lock nuts (LAN3718). Tighten all hardware.

Note the orientation of the slots and square holes in the bearing hanger (Figure 11).

**In all instances, SQUARE HOLES MATE WITH SLOTS and vise versa.**

- Support the end of auger flighting extension weldment to the bearing hanger with bearing (LAN207KRRB12) and bearing flanges (LAN105). Install the bearing onto the outer side of the bearing hanger and secure with three LAN18A and LAN3718.
- Tighten all hardware.

## Refer to Figure 12

- Install the Access Cover (LANAUGHUR-C) and secure with four 3/8" nuts (LAN3718).



Figure 10

Figure 11

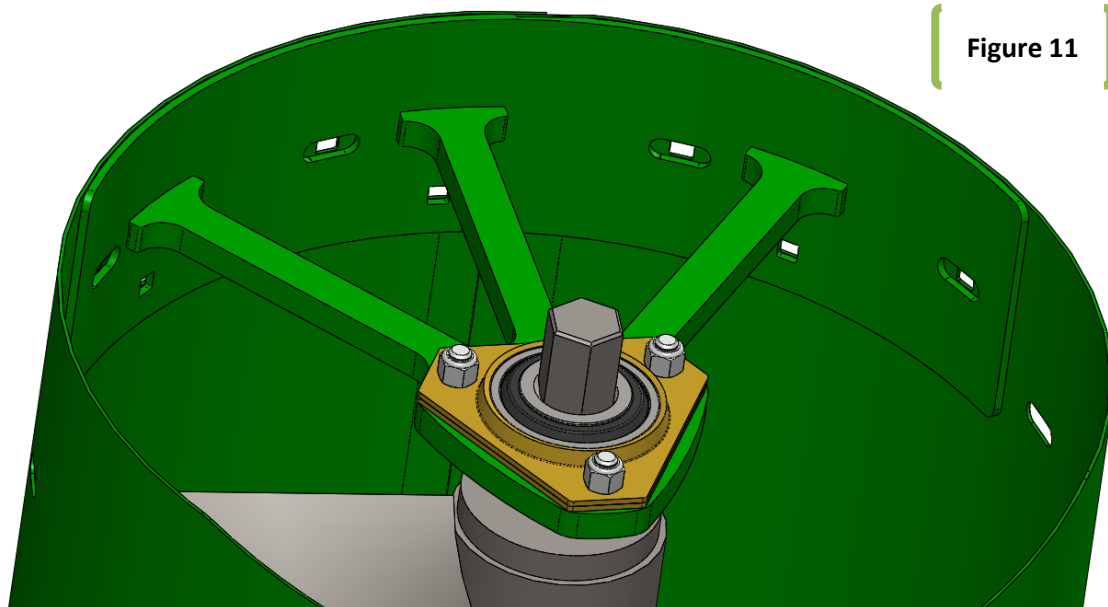


Figure 12





# Grain Saver Door Installation

## Refer to Figures 13 & 14

1. Install the Grain Saver Weldment (LANAUGHURGS) onto the end of the auger tube as shown below using existing hardware. The two bolts toward the end of the auger (that held the factory door on) should be tightened while four others remain loose for spout installation.
2. Install the stop bolt (LAN3B16A16) and jam nut (LANF-HN-0.313C) into the weld nut on the outside of the grain saver door. This acts as a stop to keep the door from opening up too far.
3. Install the plastic spout and snug up all bolts.

Figure 13

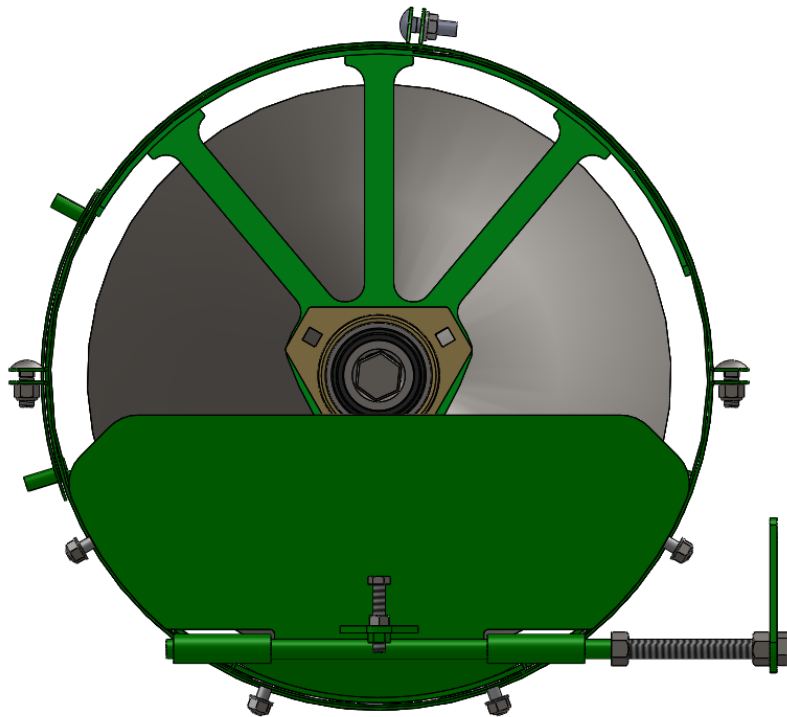
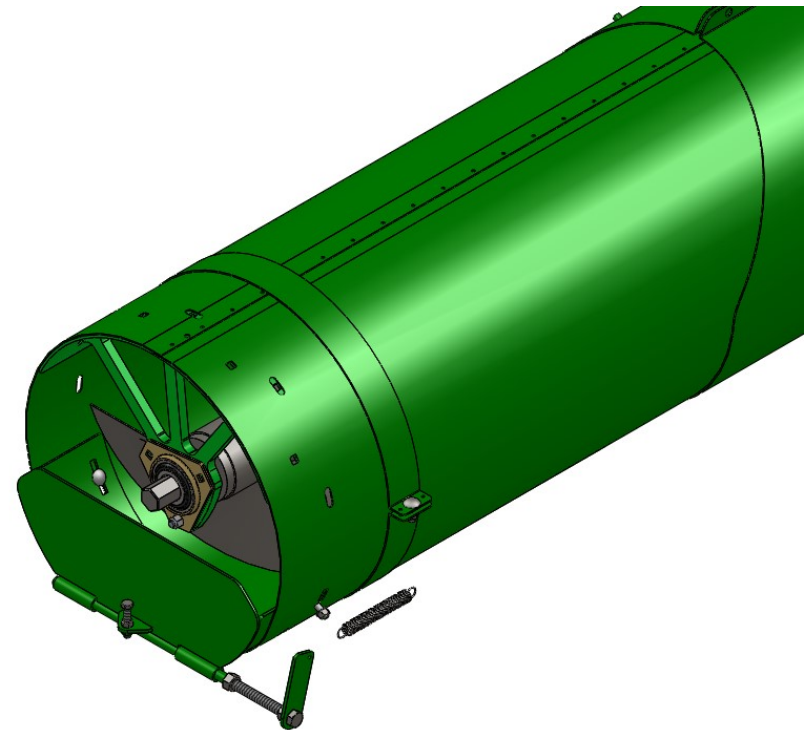


Figure 14



# Grain Saver Door Installation

## Refer to Figures 15 & 16

4. On the side of the grain saver door with the weld nut, draw a vertical line 5" from the end of the spout. (Figure 15).
5. Along the line, measure up 2-5/8" from the contour line (shown in RED in Figure 16) of the spout and make a mark.
6. Drill a 5/8" hole in the spout where the two lines cross and install the grain saver spring arm.



Figure 15



Figure 16

# Grain Saver Door Installation

## Refer to Figures 17 & 18

7. The drilled hole should line up with the nut welded to the grain saver door. Using the REDWL55, LANF-HN-0.500C and LANF011G install the grain saver door arm (LANGS24).
8. A good starting point for the band is 3" behind the plastic spout (Figure 17). Assemble the band with two of each: LANAUG295, LAN18A and LAN1618000.
9. Adjust LANGS24 (grain saver spring arm) so the spring length when installed is roughly 9" (the grain saver spring arm should tilt back 10-15 degrees - see Figure 18). Tighten all fasteners for operation.
10. Tighten the nut on the grain saver arm for operation.



Figure 17



Figure 18