LANAUGCIH1400
Installation Instructions

Auger Extensions for CASE IH 10&20 Series Combines

LANKOTA®

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Huron, SD 57350
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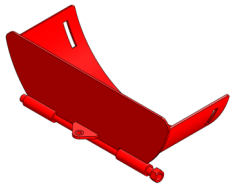
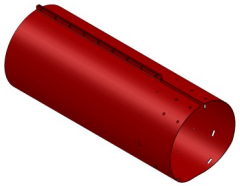
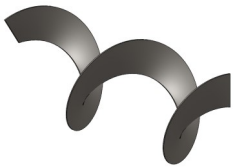
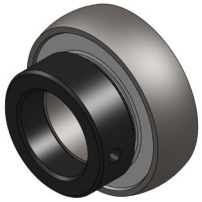
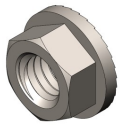
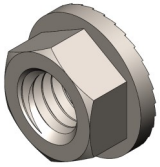
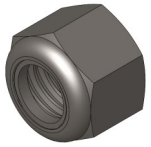
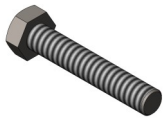
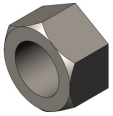
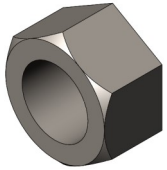
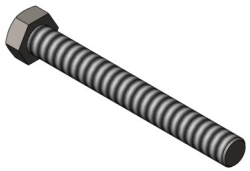
Numerical Parts List

Part Numbers	Description	Quantity
LANC14GS00	Grain Saver Door	1
LANC14GS04	Grain Saver Door Half Band	2
LANGS24	Grain Saver Door Spring Arm	1
LANHK4X7	1/2” Wide Spout Clamp	1
LANAUGCIH1401	Saddle Tube	1
LANAUGCIH1402	Bearing Hanger	1
LANAUGCIH1403	Auger Flighting	1
LANSA206	30mm Bearing	1
RED34012	Bearing Flange	2
LANAUGCIH1400KBH	**Bags of Hardware**	**1**
Each Bag Includes:		
RED305K	3/8”-16 x 1-1/4” Carriage Bolt	12
LAN3718	3/8”-16 Serrated Lock Nut	7
LANH217334	Spring	2
LAN1618000	3/8”-16 Nylon Lock Nut	11
LANF011G	1/2”-13 x 4-1/2” Full Thread Hex Head Cap Screw	1
LANF-HN-0.500C	1/2”-13 Hex Nut	1
LAN3B16A16	5/16”-18 x 1-1/4” Hex Head Cap Screw	1
LANF-HN-0.313C	5/16”-18 Hex Nut	1
LANFK303	3/8”-16 x 3/4” Carriage Bolt	4
LANFK202	5/16”-18 x 1/2” Carriage Bolt	10
LANNAS2	5/16”-18 Serrated Lock Nut	10
LAN18A32	3/8”-16 x 1-1/2” Carriage Bolt	2

NOTE: THIS KIT MAY REQUIRE THE PURCHASE OF A NEW CASE IH SPOUT. FACTORY PART # 84219375

One extra spring is included for replacement if necessary

Pictorial Parts List

 LANC14GS00 (1)	 LANC14GS04 (2)	 LANGS24 (1)	 LANAUGCIH1401 (1)	 LANAUGCIH1402 (1)	 RED34012 (2)
 LANAUGCIH1403 (1)	 LANSA206 (1)	 LAN217334 (1)	 LANHK4X7 (1)	 LANNAS2 (10)	 LANFK202 (10)
 LAN3718 (7)	 RED305K (12)	 LAN1618000 (11)	 LANFK303 (4)	 LAN3B16A16 (1)	 LANF-HN-0.313C (1)
 LANF-HN-0.500C (1)	 LANF011G (1)	 LAN18A32 (2)		 CIH #84219375 **(NOT INCLUDED)**	 LAN217334 (1) (Replacement/Spare)

Auger Extension Kit

Refer to Figures 1.1 and 1.2

CAUTION: *IN THE FOLLOWING STEPS, BE SURE NOT TO PULL THE FACTORY AUGER OUT TOWARD THE REAR OF THE COMBINE. THIS CAN CAUSE THE AUGER TO BE PULLED OUT OF THE SPLINE COUPLER NEAR ITS ROTATION POINT. SOME COMBINES ARE NOT EQUIPPED WITH AN INSPECTION DOOR AT THIS LOCATION AND THIS WILL RESULT IN SIGNIFICANTLY MORE TIME RE-INSTALLING AND TIMING THE AUGER.*

1.1 Remove the rubber boot, cap, bearing, and grain saver door from the end of the factory auger tube.

Figure 1.1

Figure 1.2

Auger Extension Kit

Refer to Figures 2.1 and 2.2

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2.1 Remove the rubber boot, cap, and bearing from the end of the factory auger tube.

2.2 Trim the provided auger flighting (LANAUGCIH1403) to fit up against the factory one. Next, trim the flighting so that no part of it comes within 1/2" of the end of the auger shaft. Weld the two pieces of flighting together and stitch weld the new piece to the auger shaft

Figure 2.1

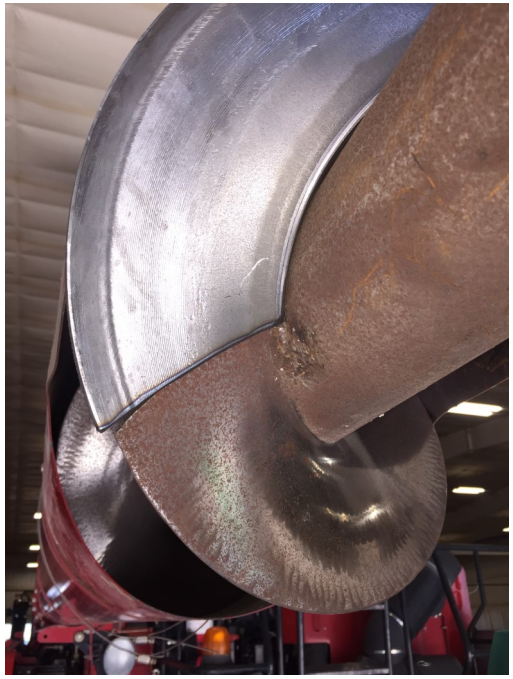


Figure 2.2

Auger Extension Kit

Refer to Figure 3

3.1 Wrap the Auger Extension Sleeve (LANAUGCIH1401) around the existing auger tube and use two 5/16" x 1/2" carriage bolts (LANFK202) and two 5/16" flange nuts (LANNAS2) to bolt the sleeve to the factory auger tube. Make sure the bolt head is to the inside of the auger tube. Leave these fasteners loose at this time.

3.2 Install nine 3/8" x 1.25" carriage bolts (RED305K) and nine 3/8" nyloc nuts (LAN1618000) in the upper flange of the Auger Extension Sleeve. Snug all of these up incrementally until the sleeve is tight on the factory auger tube.

3.3 Tighten the 5/16" fasteners at this time.

Figure 3

Auger Extension Kit

Refer to Figure 4

4.1 Using three 3/8" x 1.25" carriage bolts (RED305K) and three 3/8" flange nuts (LAN1618000), bolt the bearing (LANSA206) and two bearing flanges (RED34012) to one side of the bearing hanger (LANAUGCIH1402) as shown below. Make sure the locking portion of the bearing is on the same side of the hanger as the flanges as well as the grease zerk.

Figure 4

Auger Extension Kit

Refer to Figure 5

NOTE: *It may be necessary to use some emery cloth to clean up the auger shaft before installing the bearing*

5.1 With the flanges toward the end of the auger, slide the bearing over the shaft of the existing auger until the slots in the bearing hanger (LANAUGCIH1402) line up with the slots in the auger extension sleeve (LANAUGCIH1401).

5.2 Using a clamp to hold the bearing hanger up to the extension sleeve, install all eight 5/16" x 1/2" carriage bolts (LANFK202), with the 5/16" flange nut (LANNAS2) to the inside of the tube.

Figure 5

Auger Extension Kit

Refer to Figure 6

6.1 Make sure the entire auger is pushed all the way into its splines on the other end (covering the end of the shaft with a block of wood and hitting it with a hammer works well).

6.2 Install the bearing retainer sleeve. This will keep the auger from sliding out from this point forward.

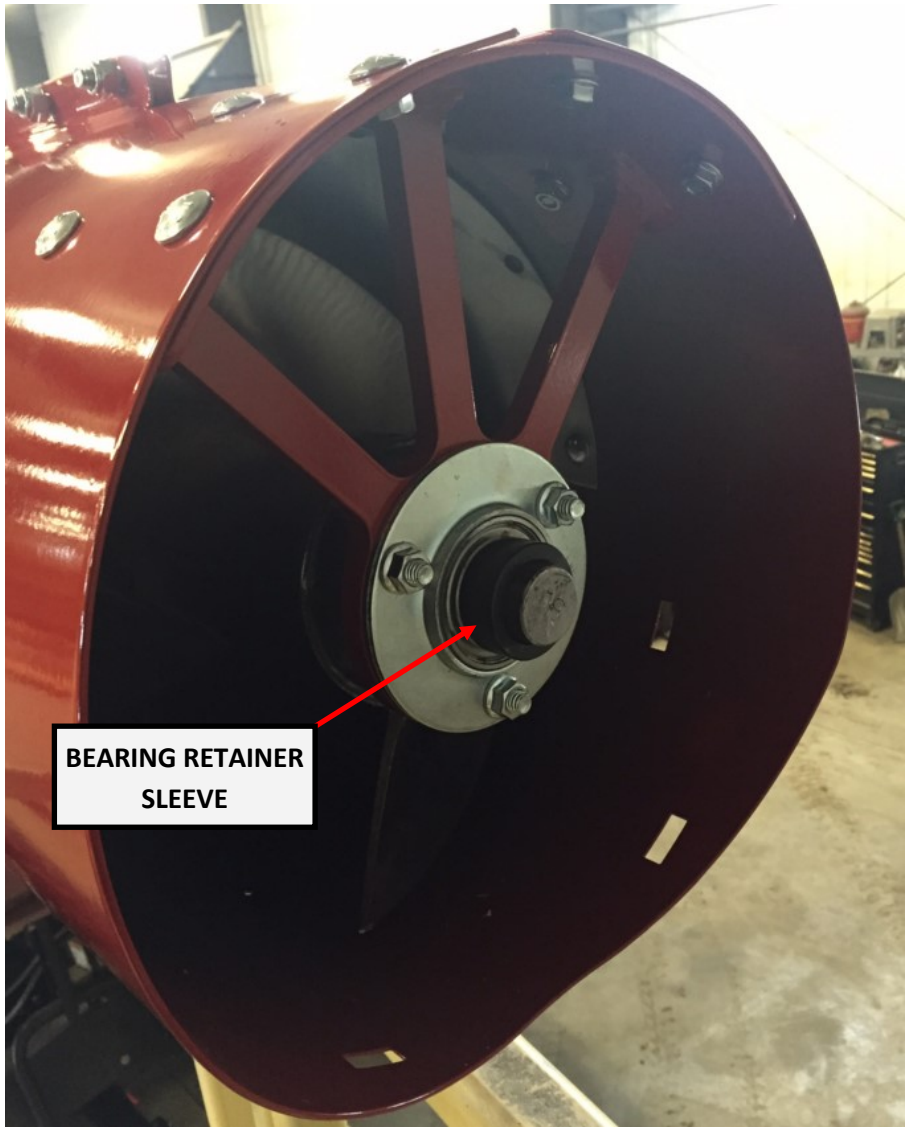


Figure 6

Auger Extension Kit

Figure 7.1

Refer to Figures 7.1 & 7.2

7.1 Install the grain saver door (LANC14GS00) using four 3/8" x 3/4" carriage bolts (LANFK303) and four 3/8" flange nuts (LAN3718). The bolt head should be on the inside of the tube.

7.2 The grain saver door should be slid to the right in the bolt slots as much as possible. This will allow it to sit at the proper angle when the auger is unloading.

Figure 7.2

Auger Extension Kit

Refer to Figures 8.1 & 8.2

8.1 Install the 5/16" x 1.25" bolt (LAN3B16A16) and hex nut (LANF-HN-0.313C) in the grain saver door with the head of the bolt to the bottom and the nut on the top.

8.2 Set the bolt so the door will open about 30 degrees below horizontal. This acts as a stop so the grain saver door spring is not over extended.

Figure 8.1

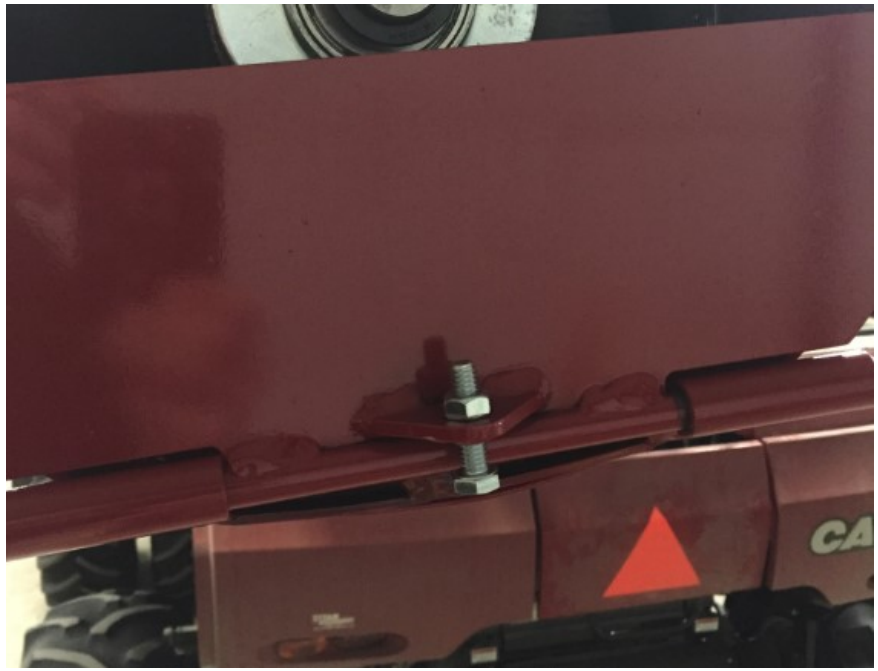


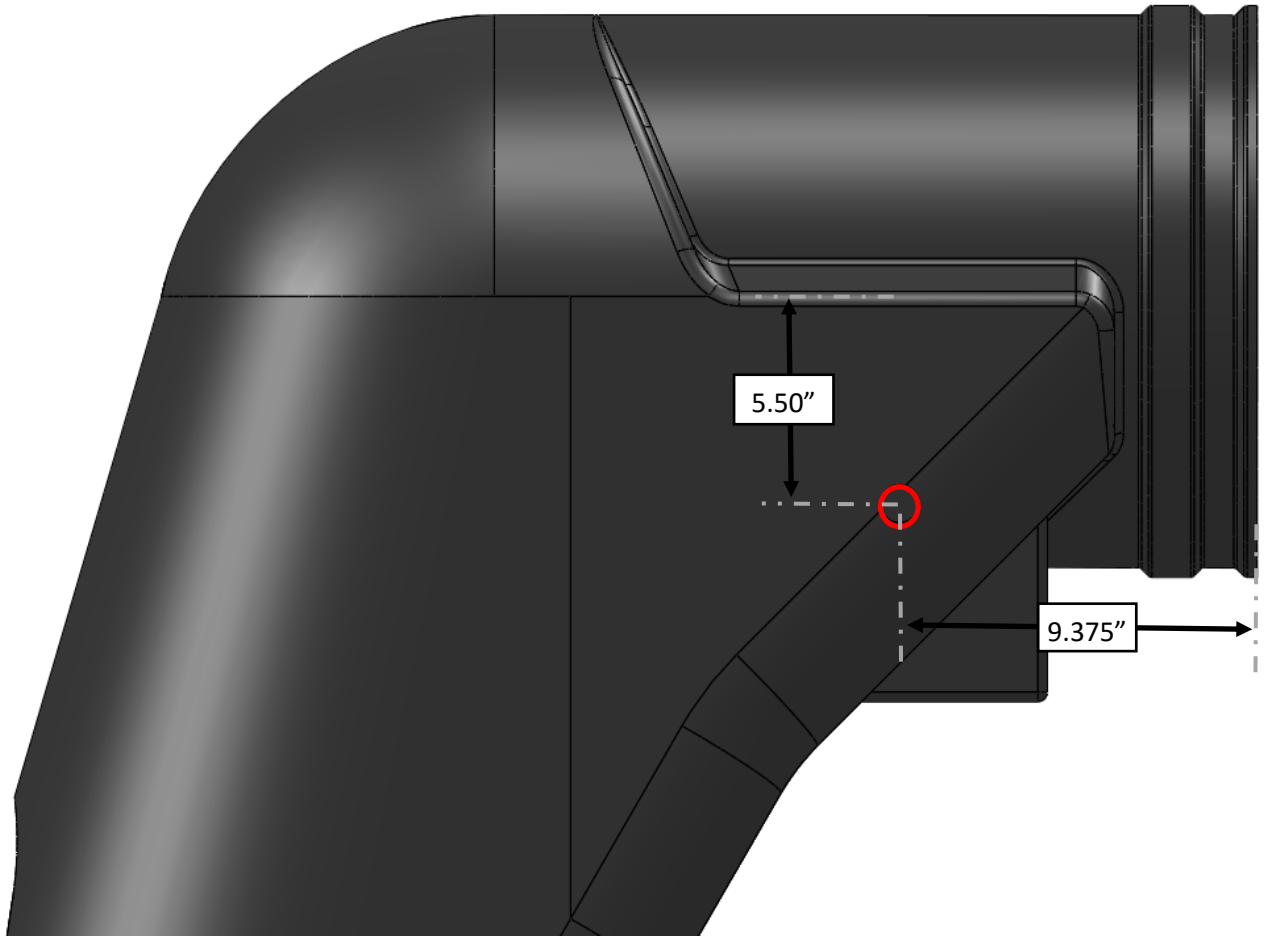
Figure 8.2

Auger Extension Kit

Refer to Figure 9

9.1 Mark out and drill a 5/8” hole 9.375” from the back of the spout (CASE IH part #84219375) and down 5.50” from the bend.

Figure 9



Auger Extension Kit

Refer to Figure 10

10.1 Install the plastic spout (CASE IH part #84219375) over the end of the auger extension and slide back until the spout hits the top flange of the saddle tube (LANAUGCIH1401).

10.2 Place the two half bands (LANC14GS04) over the back half of the spout and start two 3/8" x 1.50" carriage bolts (LAN18A32) with two 3/8" nylon insert nuts (LAN1618000). Leave loose at this time.

10.3 Install the spout clamp (LANHK4X7) in front of the half bands that were previously placed. Leave loose at this time.

Figure 10

Auger Extension Kit

Refer to Figure 11.1

11.1 Place the 1/2" x 4.5" bolt (LANF011G) through the spring arm (LANGS24) and thread on the 1/2" hex nut (LANF-HN-0.500C). Make sure the small hole in the spring arm is to the right side when looking at the head of the bolt. Leave the nut loose at this time.

Refer to Figures 11.2 & 11.3

11.2 Make sure the hole in the spout is lined up with the welded nut on the grain saver door hinge. Install and tighten the 1/2" bolt through the hole in the spout. The half bands and spout clamp may now be tightened up.

Figure 11.1

Figure 11.2

Figure 11.3

Auger Extension Kit

Refer to Figures 12.1 & 12.2

12.1 Adjust the angle of the spring arm so it tilts about 10-15 degrees back from vertical. The distance between the closest holes on the half band and spring arm should be about 8.0". Adjust the half band's rotation on the tube to achieve this. Tighten the 1/2" nut to lock the spring arm in place.

12.2 Install the spring (LANH217334) from the half band to the spring arm. Make sure the spring moves freely as the grain saver door opens up to its stopping point.

Figure 12.1

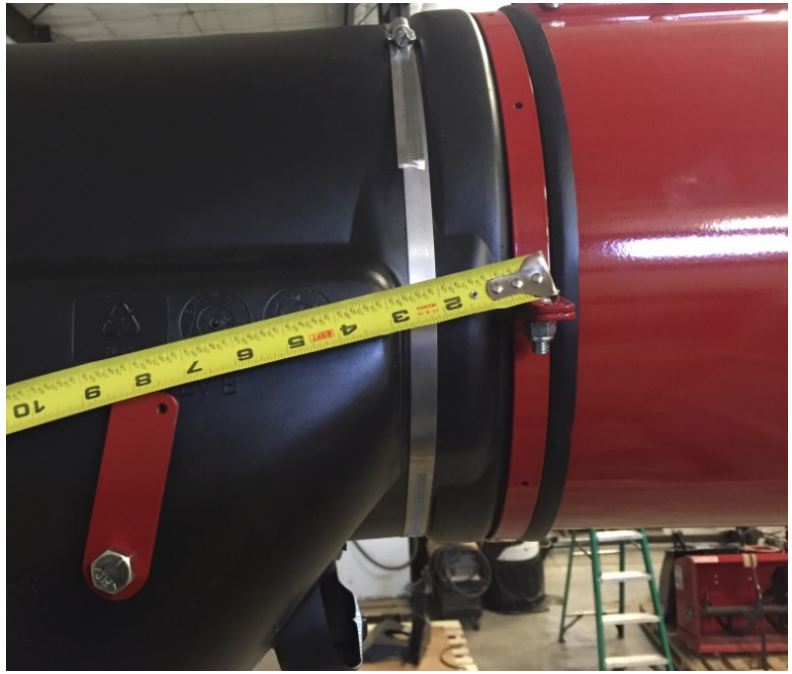


Figure 12.2

Auger Extension Kit

Refer to Figures 13.1

13.1 The measurements given to set the grain saver door stop bolt, spring arm, and half band are a very good starting point for proper grain saver door starting point, but they can be adjusted if necessary. Some important things to keep in mind are:

1. **There should always be spring force on the grain saver door when closed**
2. **The force used to hold the door open should be less than when the door is closed.**
3. **The door should always be able to return to the closed position without assistance.**

When tuned correctly, grain should flow out of the tube as normal and, when the auger is shut off, will drain for a second or two, at which point the grain saver door should close sharply.

For further technical assistance, call Lankota at 1-866-526-5682

Figure 13.1