LANUDCIH3000K

Installation Instructions

CASE IH® 5088, 5130, & 5140 Series Combine Unloading Auger Electric Clutch Disengage System

LANKOTA®

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

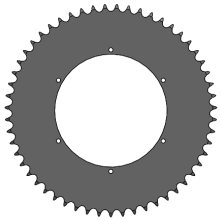
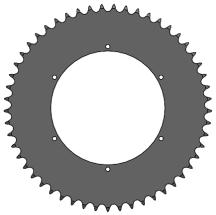
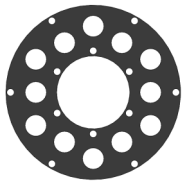
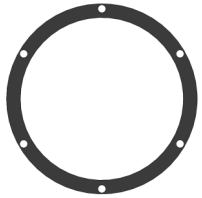
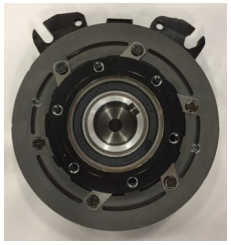
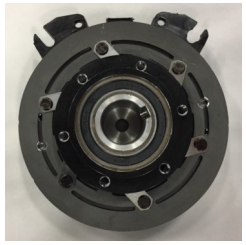
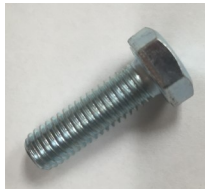
Numerical Parts List

Part Number	Description	Qty.
LANUDCIH1001	Clutch Mount Plate	1
LANCIH60A53	Sprocket - #60, 53 Teeth	1
LANCIH60A55	Sprocket - #60, 55 Teeth	1
LANUDCIH1004	Sprocket Hub	2
LANUDCIH1005	Sprocket Spacer	2
LANUDCIH1007	Keyed Washer	22
LANUDCIH2006	Clutch Spacer	2
LANI-5228-48	Electro Magnetic Clutch - REAR	1
LANI-5228-56	Electro Magnetic Clutch - FRONT	1
LAN47577188	Bearing Lock Collar	2
LAN44302	Zip Ties	10
LANUDJD1004	Sprocket Shims	6
LAN5218-251-016	Clutch Wire Lead	2

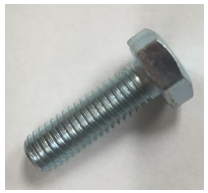
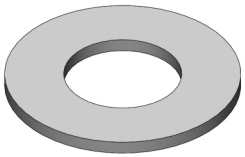
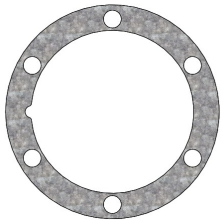
Numerical Parts List

Part Number	Description	Qty.
LANUDCIH1000KBH	**Bag Of Hardware**	**1**
—————	5/16” SAE Flat Washer	4
—————	M12-1.75 X 60mm, Grade 8.8 Bolt	2
—————	M12 Lock Washer	2
—————	M8-1.25 X 25mm, Grade 8.8 Bolt	16
—————	M8-1.25 X 35mm, Grade 8.8 Bolt	12
—————	M8 Lock Washer	24
—————	M8 Nyloc Nut	4
—————	5/8” SAE Flat Washer	10
—————	Key - 8 x 10 x 25mm	2
LANHT9261	**Wiring Harness Bundle**	**1**
—————	Cab Extension Harness	2
—————	Clutch Harness	1
—————	Cab Foot Switch	1
—————	Power Harness	1

Pictorial Parts List

 LANUDCIH1001	 LANCIH60A55	 LANCIH60A53	 LANUDCIH1004 (2)	 LANUDCIH1005 (2)
 LANUDCIH2006 (2)	 Power Harness	 Clutch Harness	 Cab Foot Switch	 Cab Extension Harness
 LANI-5228-48 (1)	 LANI-5228-56 (1)	 LAN5218-251-016 (2)	 M12 Lock Washer (2)	 M8 Lock Washer (24)
 Wiring Kit Bag Of Hardware	 M8-1.25 x 25mm, Gr. 8.8 Bolt (16)	 M8 Nyloc Nut (4)	 5/16” SAE Flat Washer (4)	 M12-1.75 x 60mm, Gr. 8.8 Bolt (2)

Pictorial Parts List

 M8-1.25 x 35mm, Gr. 8.8 Bolt (12)	 LANFWS57 (10)	 LANFWS57 (10)	 LAN44302 (10)	 Key - 8 x 10 x 25mm (2)
	 LANUDCIH1007 (22)		 LAN47577188 (2)	

For any further technical assistance,

Contact Lankota at:

866 - 526 - 5682

1. Preparation

Refer To Figure 1.1 and 1.2

1. **Unload/Empty the grain tank.**
2. **Open L/H main access door on combine, exposing the unloading auger drive chain system.**
3. **Loosen drive chain tensioner completely.**
4. **Remove drive chain, letting it hang in place for later reinstallation.**
5. **Measure the gap between the grain tank and the sprockets. This will help line up the new sprockets with the drive chain.**
6. **Remove both grain tank cross auger drive sprockets from auger shafts. Leave square shaft key installed on shafts just as they are.**
7. **Use emery cloth to clean any scuffs, burs or paint from the shafts. This will make installation of new components much easier.**

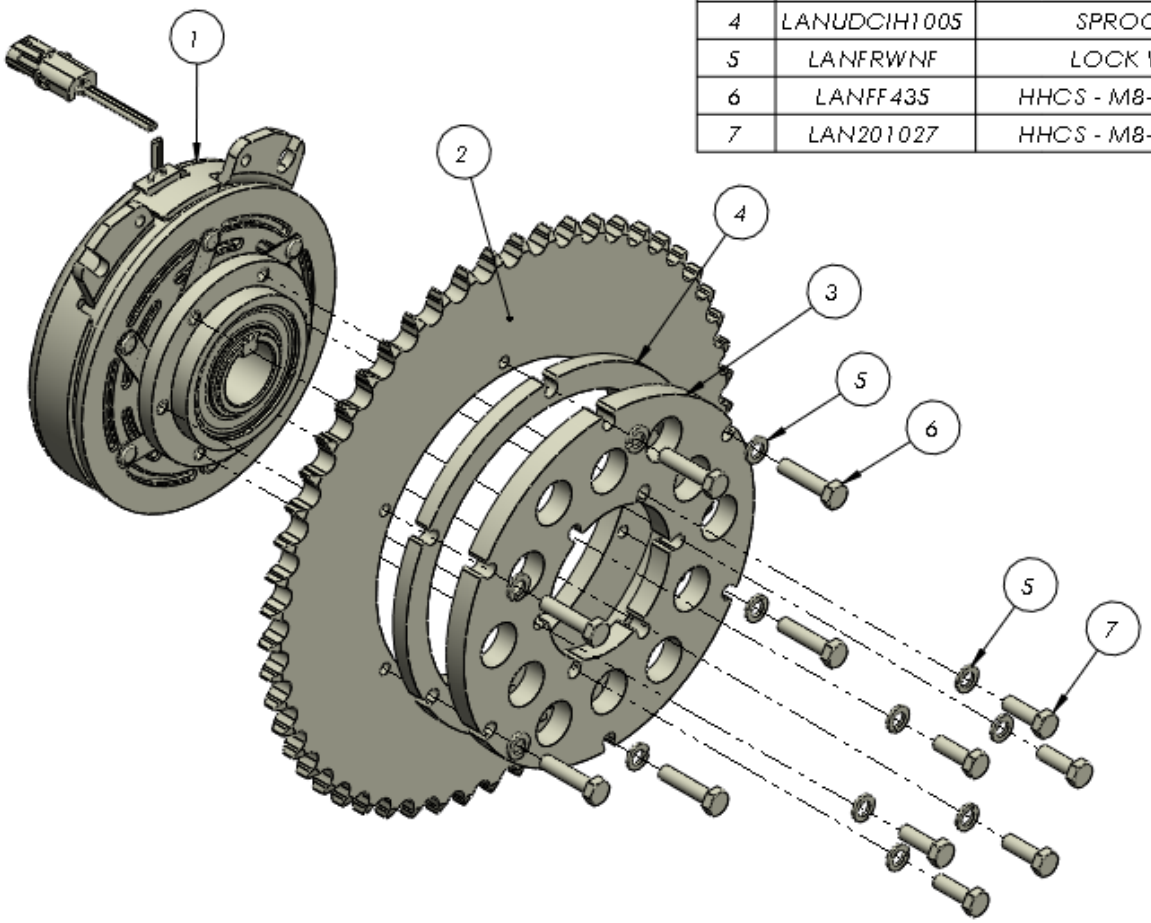
Figure 1.1

Figure 1.2

8. Bolt the 53 tooth sprocket to the clutch as shown in the drawing below.

This kit requires the LANI-5228-56 clutch to be attached to the 53 tooth sprocket and placed on the FRONT unloading auger shaft!!

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	LANI-5228-48 or LANI-5228-56	REAR CLUTCH or FRONT CLUTCH	1
2	LANCIH60A53	SPROCKET - CIH - NO. 60, 53 TOOTH	1
3	LANUDCIH1004	SPROCKET HUB	1
4	LANUDCIH1005	SPROCKET SPACER	1
5	LANFRWNF	LOCK WASHER - M8	12
6	LANFF435	HHCS - M8-1.25 X 35, GR. 8.8	6
7	LAN201027	HHCS - M8-1.25 X 25, GR. 8.8	6

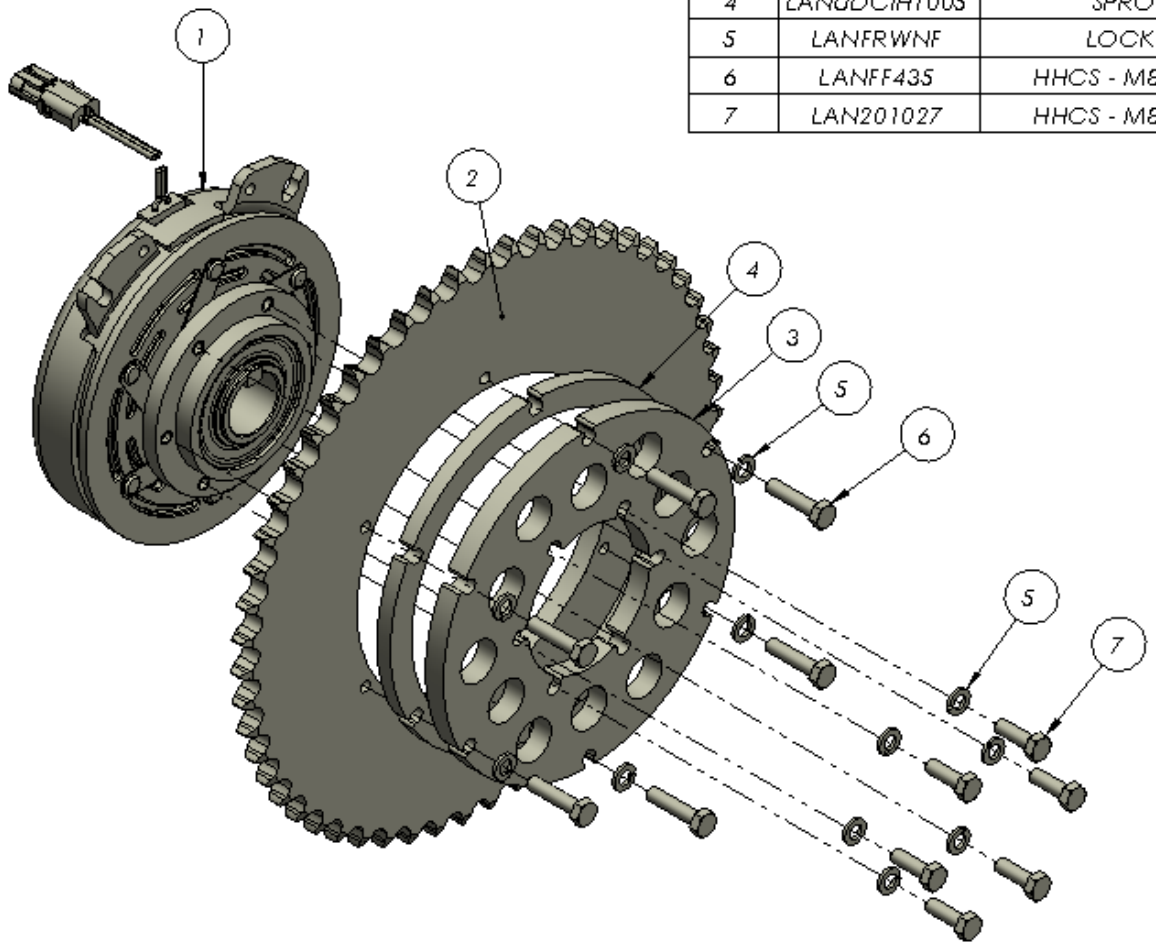


NOTE: Shims (LANUDJD1004) are provided to bolt between the clutch and sprocket hub and 5/8" washers are provided to place between the clutch and auger shaft. *You may not need to use any of these. The installer needs to make sure all sprockets run on the same plane and line up with the chain properly!*

9. Bolt the 55 tooth sprocket to the clutch as shown in the drawing below.

This kit requires the LANI-5228-48 clutch to be attached to the 55 tooth sprocket and placed on the REAR unloading auger shaft!!

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	LANI-5228-48 or LANI-5228-56	REAR CLUTCH or FRONT CLUTCH	1
2	LANCIH60A55	SPROCKET - CIH - NO. 60, 55 TOOTH	1
3	LANUDCIH1004	SPROCKET HUB	1
4	LANUDCIH1005	SPROCKET SPACER	1
5	LANFRWNF	LOCK WASHER - M8	12
6	LANFF435	HHCS - M8-1.25 X 35, GR. 8.8	6
7	LAN201027	HHCS - M8-1.25 X 25, GR. 8.8	6



NOTE: Shims (LANUDJD1004) are provided to bolt between the clutch and sprocket hub and 5/8" washers are provided to place between the clutch and auger shaft. *You may not need to use any of these. The installer needs to make sure all sprockets run on the same plane and line up with the chain properly!*

Refer To Figure 1.3

10. **Mount one of the clutches. Measure between the grain tank and sprocket; compare this with the previous measurement.**

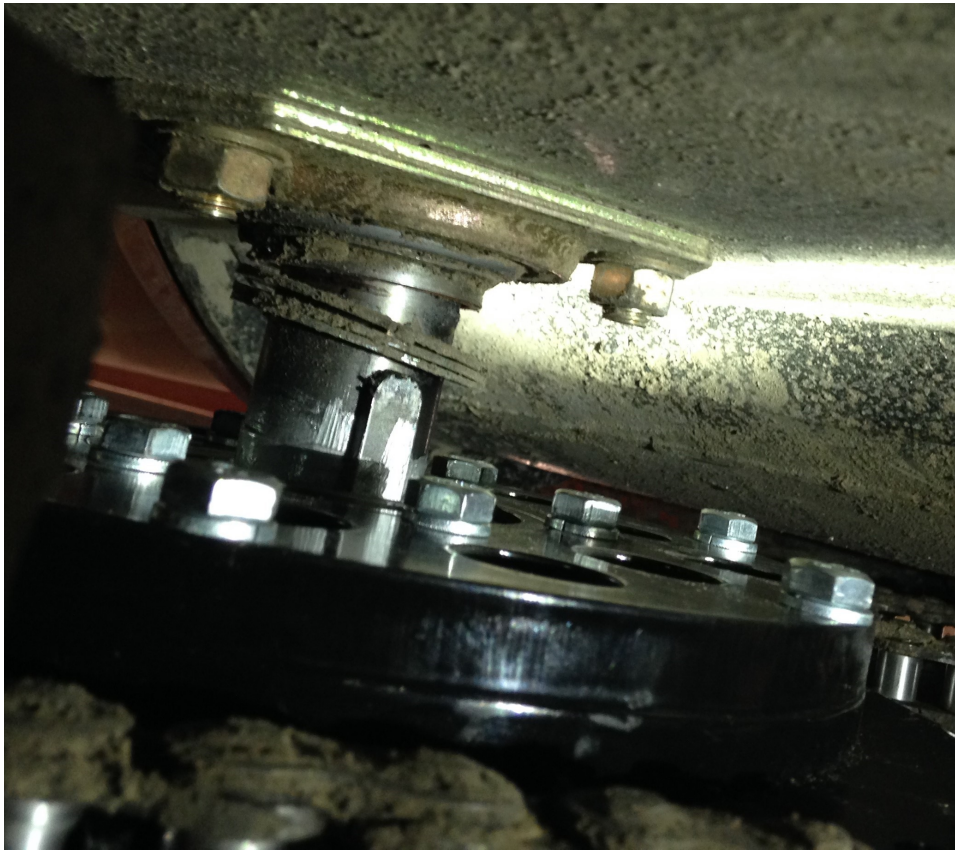
11. **Use the 5/8" flat washers (LANFWS57) or the clutch spacer (LANUDCIH2006) inside the clutch to move the sprocket out, OR the sprocket shims (LANUDJD1004) between the sprocket and clutch to move it in.**

12. **When the sprocket is set, examine the shaft behind the clutch and then remove the clutches:**

    a) **If the locking collar (LAN47577188) will fit, remove the shaft keys and install the (2) eccentric lock collars on the shafts. Then replace the keys.**

    b) **If the lock collars will not work, leave the keys in place and fill the space with the keyed washers (LANUDCIH1007).**

Figure 1.3



2. Clutch & Sprocket Installation

Refer To Figure 2.1

NOTES:

- **It is STRONGLY recommended that anti-seize be applied to the auger shaft before installing the clutch & sprocket assembly.**
- **Use a small amount of thread locking compound on each bolt to secure clutch/ sprocket assembly to drilled shafts.**

1. **Using the 5/8" flat washers (LANFWS57) or the clutch spacer (LANUDCIH1006) inside the clutch, OR the sprocket shims (LANUDJD1004), make sure the sprocket lines up with the chain properly when the sprocket assemblies are placed on the auger shaft. Fasten using one M12-1.75 x 60mm Grade 8.8 Bolt with thread locking compound and one M12 Lock Washer per shaft. Make sure the 55 tooth sprocket is on the rear shaft and the 53 tooth sprocket is on the front shaft. The grain tank unload augers will need to be kept from rotating to tighten these bolts.**
2. **Install the chain onto the sprockets in the same manner it was taken off.**

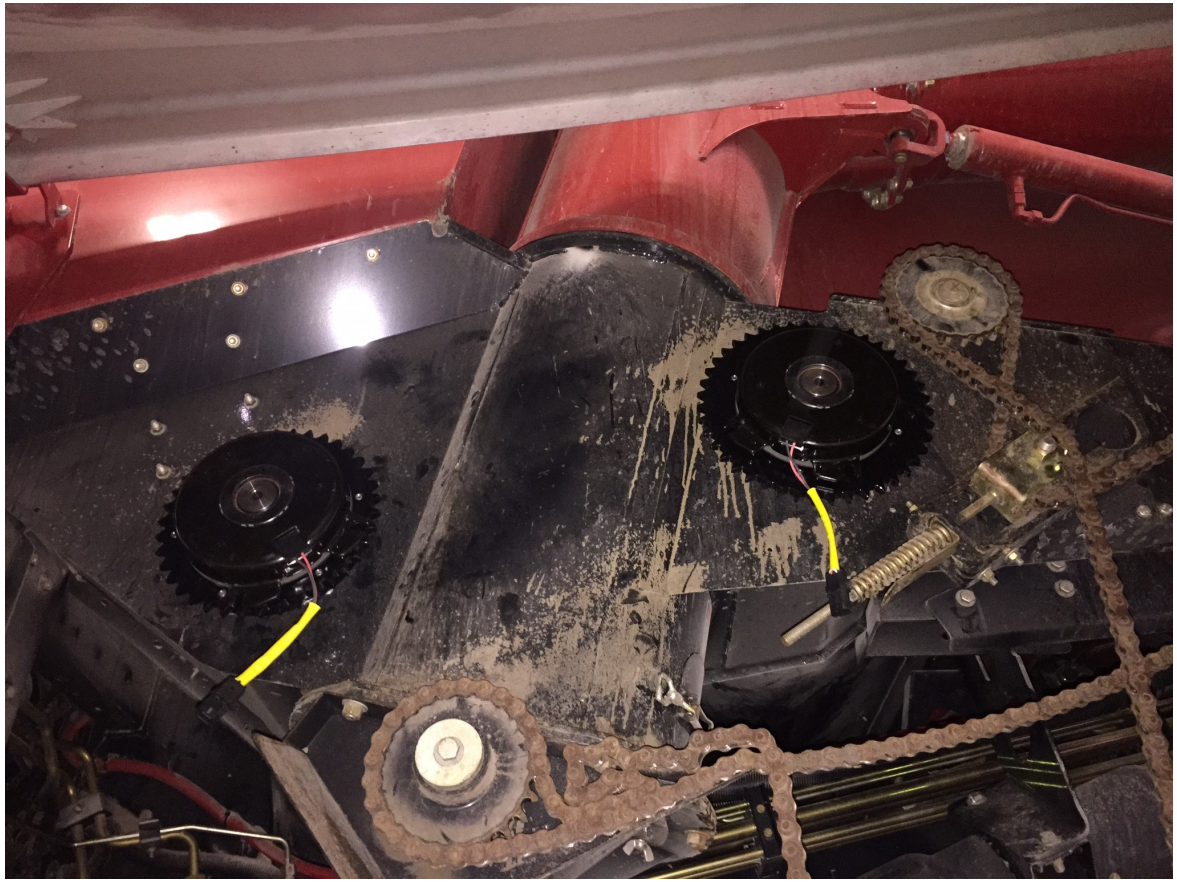


Figure 2.1

2. Clutch & Sprocket Installation

Refer To Figure 2.2

3. **Locate four M8-1.25 x 25mm Grade 8.8 Bolts, four M8 Nyloc Nuts and four 5/16" SAE Flat Washers from the supplied bag of hardware and use to attach Clutch Mount Plate (LANUDCIH1001) to both front and rear clutch assemblies. Tighten the hardware at this time.**
4. **Plug the clutch wire leads (LAN5218-251-016) into the clutches.**
5. **Tighten the unload drive chain as outlined in the COMBINE OPERATOR'S MANUAL.**

Figure 2.2

3. Rear Wiring Harness Installation

Refer To Figure 3.1

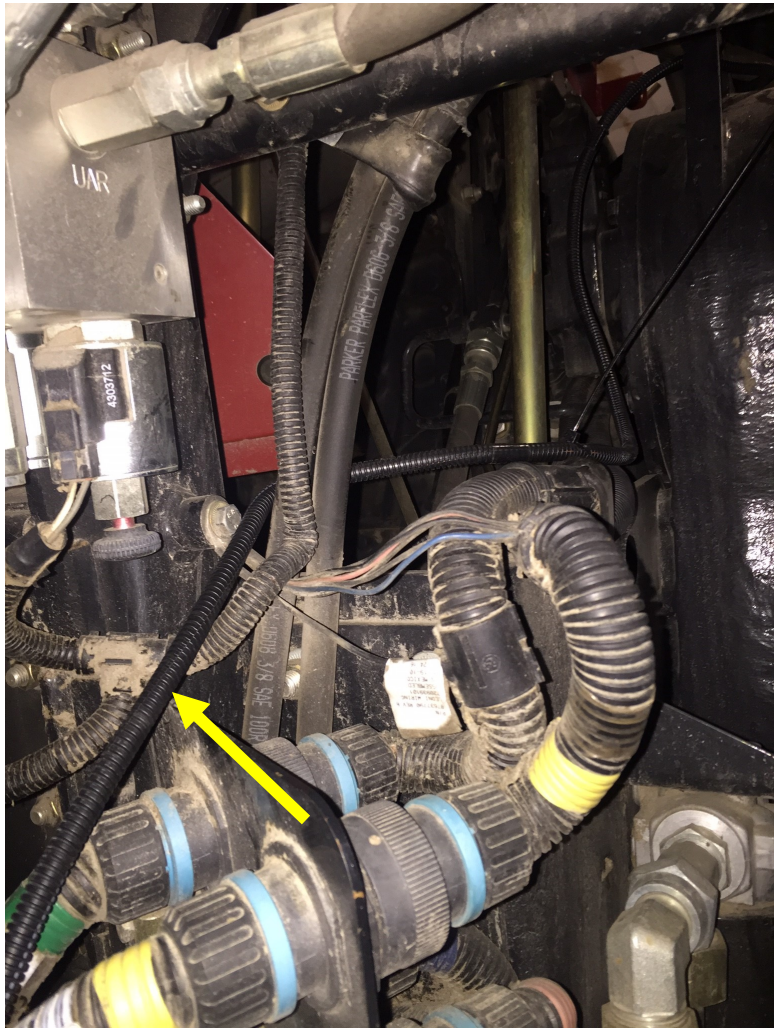
The supplied wiring harness has two different style connector ends to fit many different model combines. Choose the connectors that match your combines connectors.

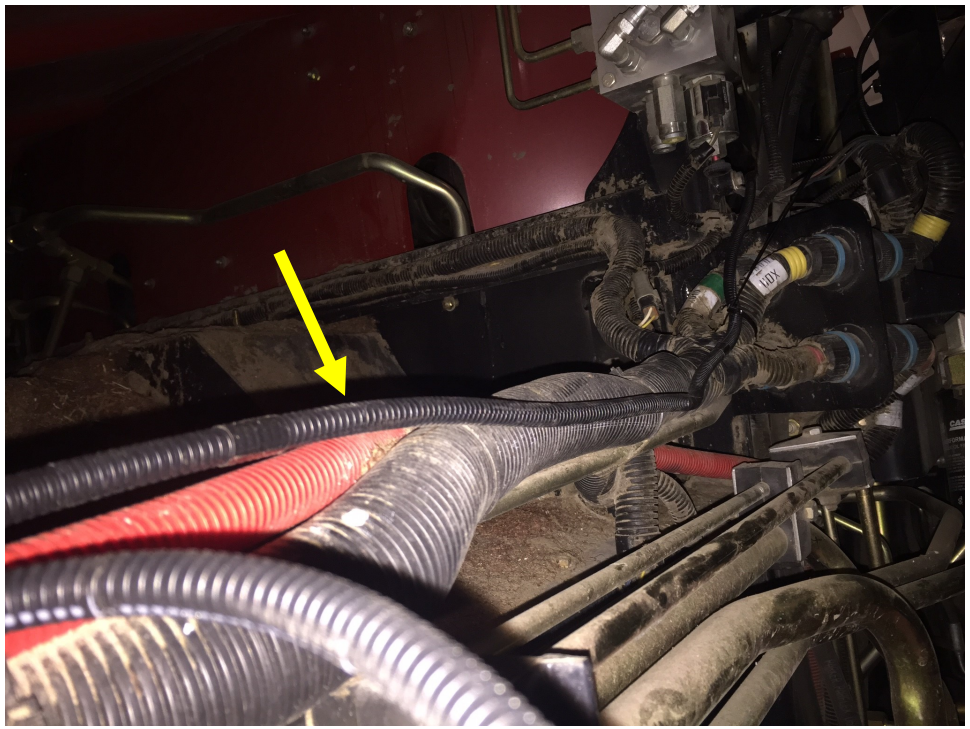
1. **Access the left side of the combine.**
2. **Locate the unloading auger solenoid wiring connectors on the left side of machine.**
3. **From the supplied wiring harness kit, locate the Main Rear Harness which is the longest wiring harness wrapped with a braded cover which has several connector ends.**
4. **Connect the wiring harness to the connectors on the combine.**
5. **Whichever connectors do not get used, connect those to each other.**
6. **Secure wires with a zip tie.**

Figure 3.1

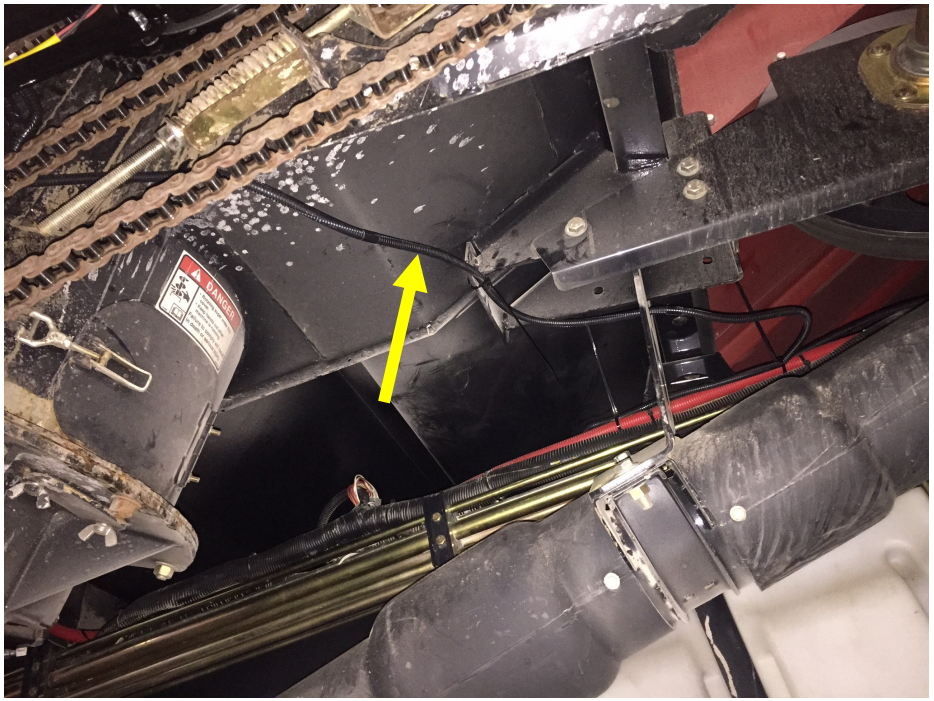
Route wiring harness similar to the next figures. Secure harness as needed using supplied bag of hardware that came in the wiring bundle and/or the supplied zip ties (LAN44302). The harness is indicated with a yellow arrow. Route may differ depending on combine model.

3. Rear Wiring Harness Installation





3. Rear Wiring Harness Installation



Refer To Figure 3.2

5. **Route the clutch harness to the clutches and plug into the clutch wire leads (LAN5218-251-016).**
6. **Attach the ground wire to a nearby bolt on the frame (ensure a good connections)**
7. **Secure all wires with zip ties to avoid any damage.**

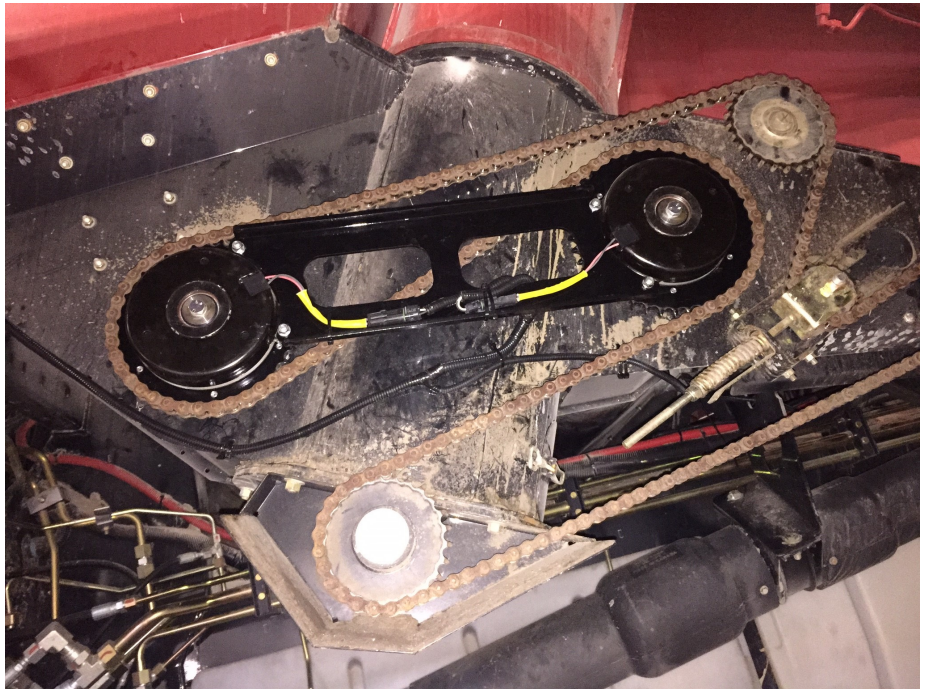


Figure 3.2

Refer To Figure 3.3

8. **Continue harness forward along the hinge point of the large L/H main access door.**

9. **Attach harness where you can to avoid any damage during operation of combine and/or opening and closing of the side shield.**

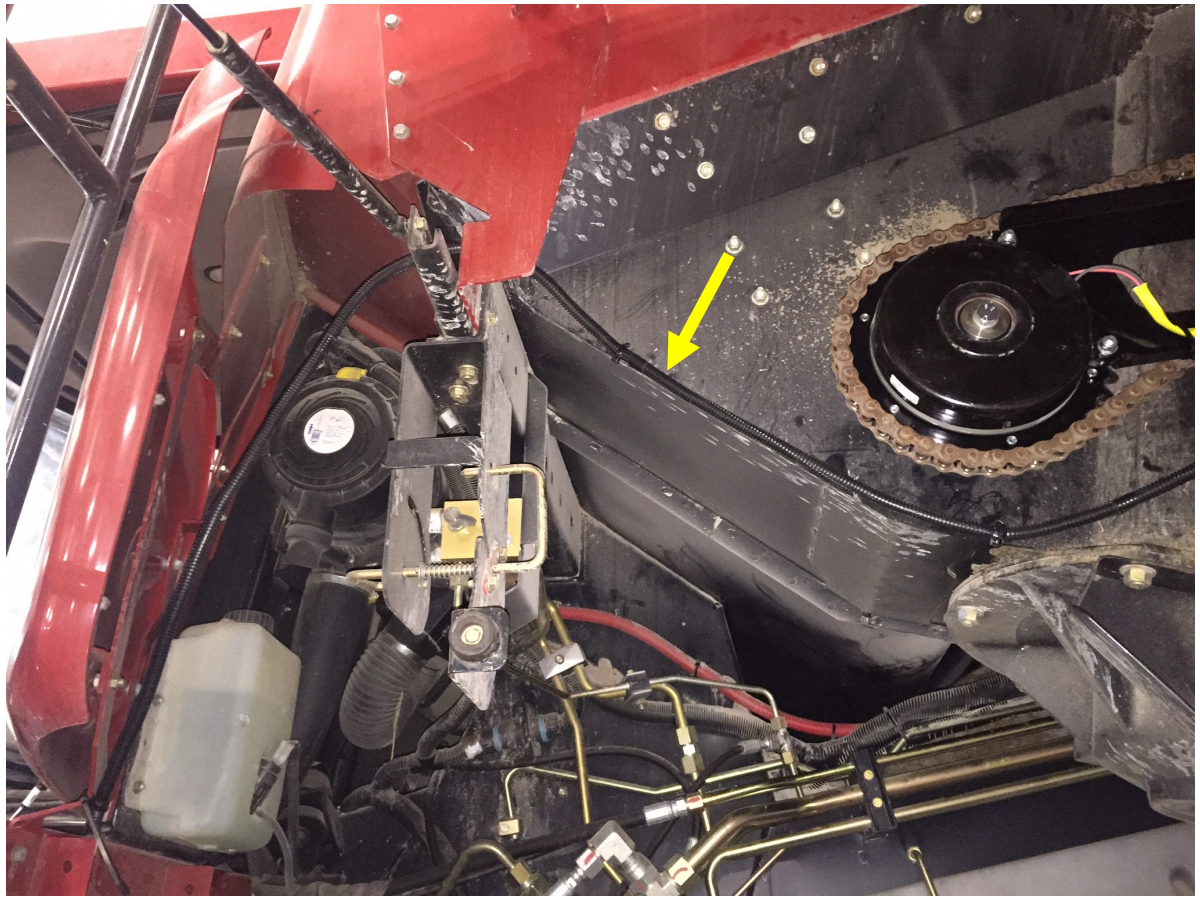


Figure 3.3

3. Rear Wiring Harness Installation

Refer To Figure 3.4

10. Run harness below the walking platform as close to the cab access door as you can.

11. Secure where you can to avoid damage to harness.

This harness WILL NOT continue into combine cab.

Figure 3.4

4. Cab Wiring Harness Installation

Refer To Figures 4.1 & 4.2

NOTE: *BEFORE PROCEEDING, DISCONNECT ANY BATTERY POWER SOURCE TO THE CAB.*

1. **Locate Power Harness from wiring bundle. This harness has eyelets on a black and red wire and a plug on the other end.**
2. **Locate and remove the fuse panel cover (blue arrow). Connect the power eyelet to the bolt indicated with the red arrow and the ground wire to the bolt indicated with the white arrow.**

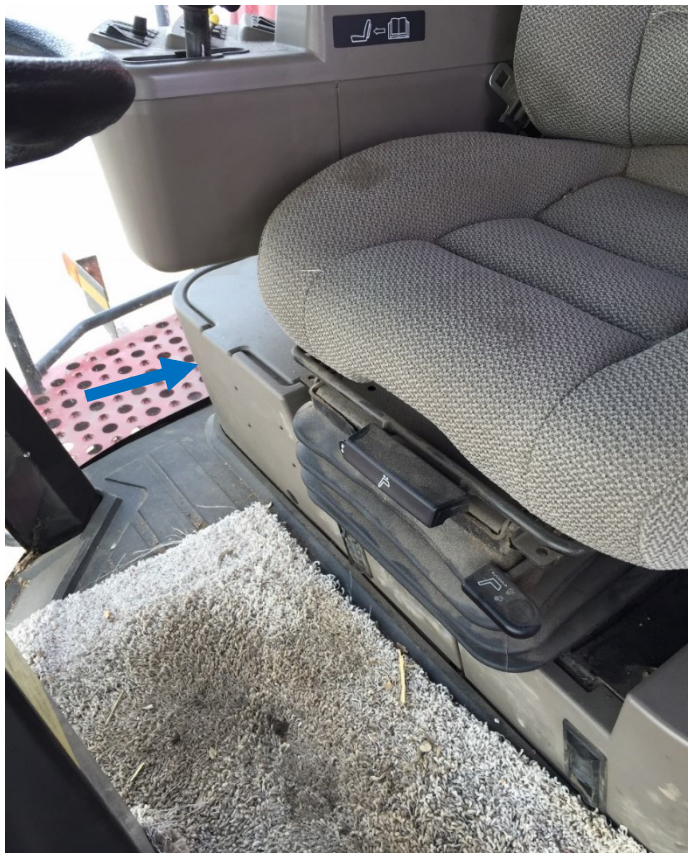


Figure 4.1

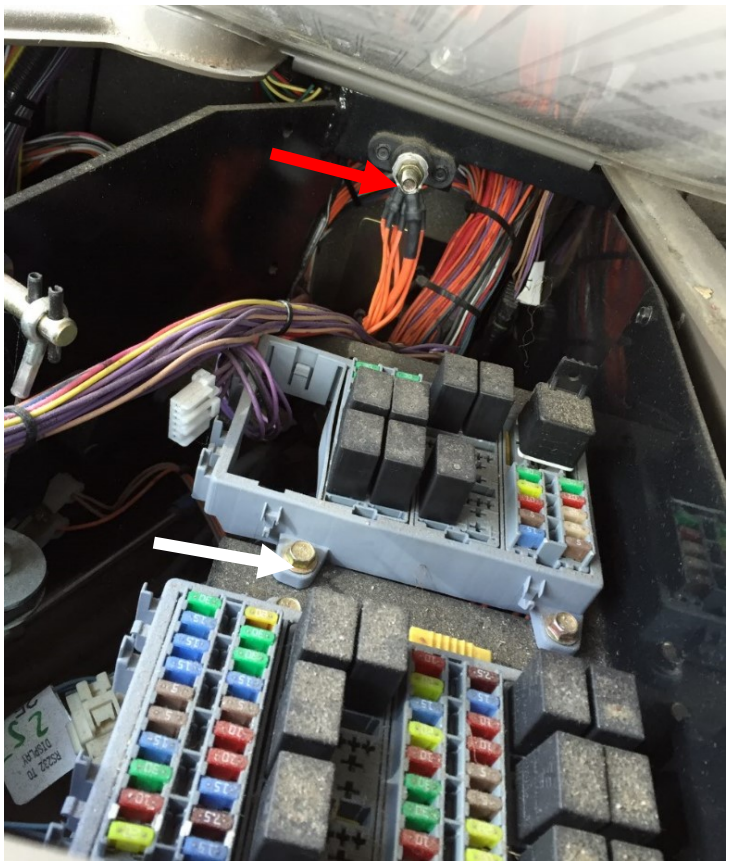


Figure 4.2

4. Cab Wiring Harness Installation

Refer To Figure 4.3

3. **Locate Cab Extension Harness. It has a single plug on one end and two plugs on the other.**
4. **Plug the corresponding connector into the Power Harness.**
5. **Locate Foot Switch Controller that is supplied in wiring kit. Place in cab where desired. Route cord as best able to avoid congestion with feet and brake pedals.**
6. **Plug connector from Foot Switch Controller into connector on Cab Extension Harness.**
7. **Route Cab Extension Harness under the front lip of the floor mat as shown in the image.**

Figure 4.3

4. Cab Wiring Harness Installation

The following steps are suggestions for one way to route the wires. Depending on your cab, there may be a better way, just make sure the wires will not be pinched or damaged while in use.

Refer To Figure 4.4

8. **Run the harness under the front lip of the floor mat and to the front bottom corner of the combine cab access door.**

Refer To Figure 4.5

9. **Run the excess length of the Cab Extension Harness in the corner of the doorway and under the walking platform.**

Figure 4.5

Figure 4.4

4. Cab Wiring Harness Installation

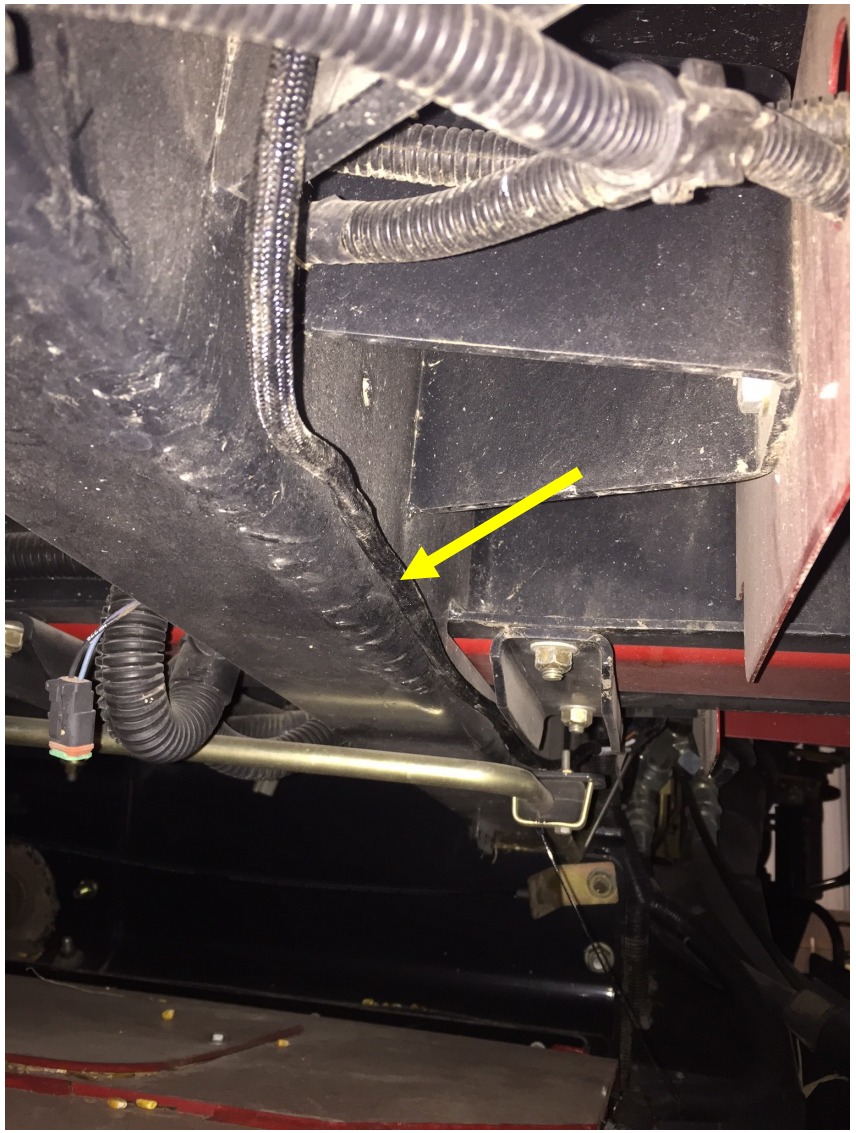
Refer To Figure 4.6

10. **Connect end of Cab Extension Harness to harness previously installed in access door area on the bottom side of the ladder landing.**

11. **Secure harness where you can to avoid damage during operation.**

12. **Tidy up harness in cab as best as possible to avoid damage.**

Figure 4.6



Finishing

1. Make one final check to complete wiring harness to ensure there are no points in the harness that will come in contact with anything that may damage harness during combine operation and/or L/H main access door opening and closing.
2. Do a final check of all nuts, bolts etc. installed to make sure they are all tight and secure.

Test Run & Burnishing

Test run the system. The unloading auger system should work exactly the same as it did before you installed this kit except when the foot switch is engaged the two grain tank cross augers will stop turning allowing the unloading auger to empty out roughly 85 - 90%. As soon as pressure is released from the foot switch the augers will reengage. This means that anytime you want the cross augers not to turn, you must have your foot on the foot switch.

Note: Burnishing the clutches is VERY IMPORTANT!

Burnishing the clutches ensures that when the system in engaged under load, the clutches mesh appropriately instead of slipping and burning up. To burnish the clutches:

1. Swing out the auger.

2. Start the unloading auger.

3. Press and release the foot switch 25-30 times.