

LANRB19380

Installation Instructions

Lankota Net Wrap Assist for Hesston Balers with Net Wrap

(Massey Ferguson and Challenger 2946, 2946A, 2956, 2956A)

(Challenger RB56CA)

LANKOTA®

270 West Park Avenue

Huron, SD 57350

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Numerical Parts List

Part Numbers	Description	Qty
LANRB050	Winch Housing	1
LANRB052	Winch Housing Cover	1
LANRB054	Access Door Assembly	1
LANRB055	Support Member	2
LANRB056	Cable Roller Arm	1
LANRB057	Upper Winch Housing Support	1
LANNAS2	5/16" Serrated Flange Lock Nut	10
REDB203	5/16" x 1" Hex Bolt, Gr. 5	8
LANRB004	Net Wrap Lifting Hook	1
LANRB008	Magnet Plate	1
LANRB009	Hinge Backer Plate	1
LANMCHN40	1.5" Magnet	3
LANAH161580	Snap Over Latch	2
LANRBWH1	Wiring Harness - Tractor Battery to Rear of Tractor	1
LANRBWH2	Wiring Harness - Winch to Front of Baler	1
LANRBWH3	Wiring Harness - Winch Relay to Winch	1
LAN101025	Warn VRX-25 Winch	1
LANRB18222BH	Box of Hardware	1
Each Bag Includes:		
LAN8863T28	Loop Clamp	3
LANF90631A007	#6 Nyloc Nut	5
LANF92210A148	#6 Flat Head Screw	5
LANF06WS	#10 Socket Head Screw	2
LANF92949A537	1/4" Socket Head Screw	2
LAN9657K21	3" Compression Spring	1
LAN9600K321	Push-in Grommet	2

Numerical Parts List

Part Numbers	Description	Qty
LANRB18222BH Continued...		
Each Bag Includes:		
LAN14M7298	M8 Flange Nut	1
LAN1133	5/16" Flat Washer	14
LAN18A	3/8" x 1" Carriage Bolt	3
LAN3718	3/8" Serr Flange Nut	14
LANB203	5/16" x 3/4" Hex Bolt	6
LANEJRN	1/4" Nyloc Nut	2
LANFODNU	#10 Nyloc Nut	5
LANFH1H2M	#10 Flat Head Screw	3
LANFK303	3/8" x 3/4" Carriage Bolt	12
REDWU51	1/4" Flat Washer	2
LAN44302	Zip Tie	12
LANFHB400	4" Hole Saw	1
LANFM7KV	3/8" x 1" Serr Flange Bolt	5
LAN1618000	3/8" Nyloc Nut	2
LAN18000	3/8" Flat Washer	6
LAN18A00	3/8 x 1" Bolt	2
LANFOEL2	#10 SAE Flat Washer	3
LAN32809	5/16" Ring Terminal	1
LANPRVW	1/4" x 3/4" Thread Forming Bolt	1

**Attention: Some winch vendor hardware provided in winch box will be used but is not listed above.
Note: Not all winch vendor hardware will be used.**

Pictorial Parts List

					
LANRB050 (1)	LANRB052 (1)	LANRB054 (1)	LANRB055 (2)	LANRB056 (1)	LANRB057 (1)
					
LANNAS2 (10)	REDB204 (8)	LANRB004 (1)	LANRB008 (1)	LANRB009 (1)	LANMCHN40 (3)
					START OF HARDWARE BAG
LANAH161580 (2)	LANRBWH1 (1)	LANRBWH2 (1)	LANRBWH3 (1)	LAN101025 (1)	
					
LAN8863T28 (3)	LANF90631A007 (5)	LANF92210A148 (5)	LANF06WS (2)	LANF92949A537 (2)	LAN9657K21 (1)

Pictorial Parts List

					
LAN9600K321 (2)	LAN14M7298 (1)	LAN1133 (14)	LAN18A (3)	LAN3718 (14)	LANB203 (6)
					
LANEJRN (2)	LANF0DNU (5)	LANFH1H2M (3)	LANFK303 (12)	REDWU51 (2)	LAN44302 (12)
					
LANFHB400 (1)	LANFM7KV (5)	LAN1618000 (2)	LAN18000 (6)	LAN18A00 (2)	LANF0EL2 (3)
					
LAN3208 (1)	LANPRVW (1)				

Preparation

Refer to Figures 1 - 2

1. Attach the blue wire to the blue winch post and the yellow wire to the yellow winch post (LANRBWH3). Use the nuts provided in the winch hardware bag (P/N: 100666). Route wires as shown in Figure 1.
2. Attach the winch to the main enclosure (LANRB050) as shown, with the cable spooling off the top of the drum, using the M8 X 20 bolts and lock washers provided in the winch hardware bag (P/N: 100666).



Figure 1

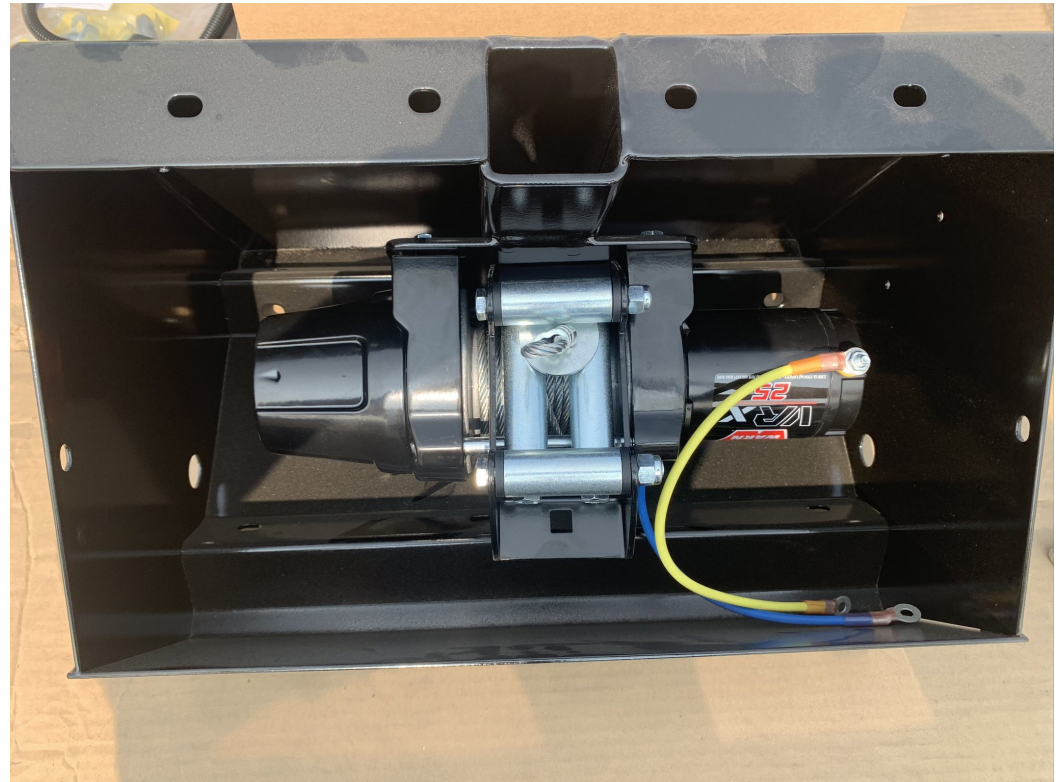


Figure 2

Kit Installation

Refer to Figures 3 & 4

3. Mount the winch relay to the inside of the main enclosure (LANRB050), as shown in Figure 10, with two bolts, washers and lock nuts included in the winch hardware bag (P/N: 74539, wrench size: 8 mm).
4. Attach plate LANRB008 to the winch switch using the two small screws provided in the winch hardware bag (P/N: 74373).
5. Starting at the rocker switch, slide the slit loom over cable the entire length.



Figure 3



Figure 4

Kit Installation

Refer to Figures 5 & 6

6. Install a rubber grommet (LAN9600K321) over the end of the winch switch cable. Install a rubber boot protectors over both the eye terminals of the wiring harness (LANRBWH2) and the eye terminal of the 4' black grounding wire.
7. Route the winch switch cable in through the hole in the left side of the winch enclosure (LANRB050), shown in Figure 4, behind the square tube, and over to the winch relay.
8. Route the eye terminals on LANRBWH2 and 4' black grounding wire in through the hole in the right side of the winch enclosure and to the winch relay.
9. Using a flat screw driver, carefully work around the rubber grommet, tucking the inside lip into the winch enclosure.



Figure 5

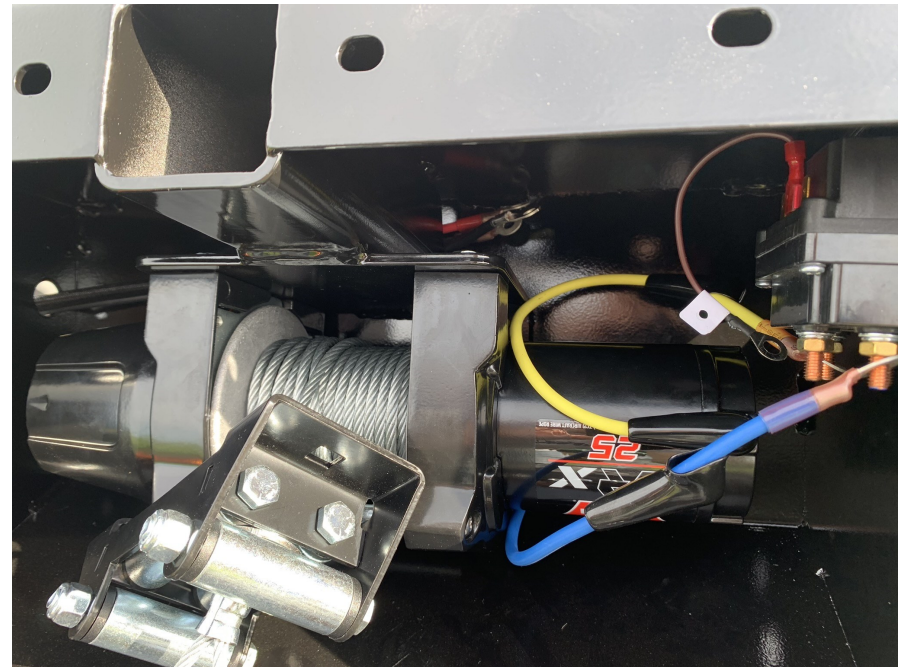


Figure 6

Kit Installation

Refer to Figures 7 & 8

For the following steps, use hardware provided in the winch hardware bag (P/N: 100668).

10. Wire the winch relay as shown. **NOTE: Do not over tighten the nuts on the relay posts as this can cause damage to the relay.**
11. The ignition power wire for the winch switch (shown with a red arrow in Figure 6) must be wired to the red stud on the winch relay, with the red wire from harness LANRBWH2 (shown in Figure 7).
12. The brown jumper wire must be wired to the black relay stud with the black wire from harness LANRBWH2 and the 4' black wire (shown in Figure 6).
13. Use LANRBWH3 to connect the yellow winch stud to the yellow relay stud and the blue winch stud to the blue relay stud.
14. Ensure all nuts on the relay are secure and black rubber boots from the winch hardware bag (P/N:74543) are installed over the terminal ends.

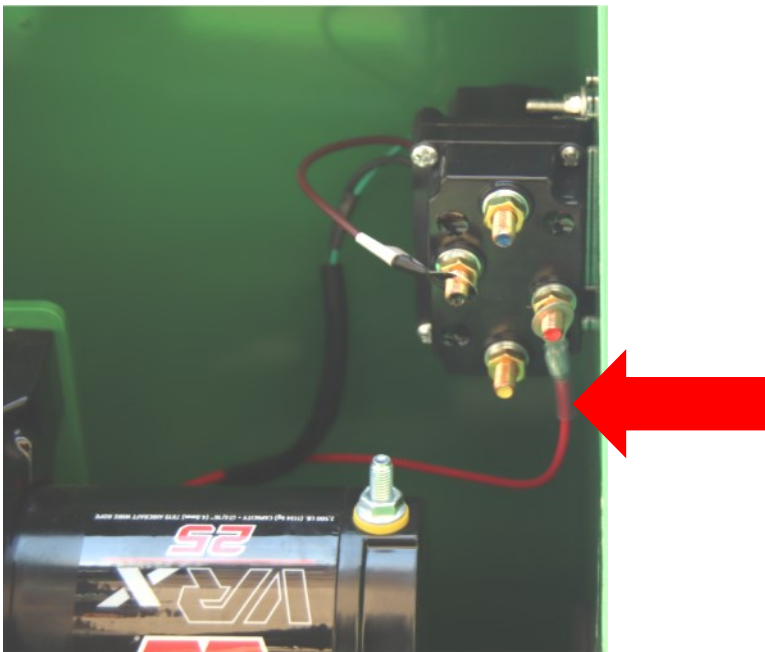


Figure 7



Figure 8

Kit Installation

Refer to Figures 9 & 10

- Slide the spring (LAN9657K21) over the loop at the end of the cable.
- Remove the cotter pin and pin from the hook. Attach the hook to the cable with pin, cotter pin AND a 3/8" washer (LAN18000) on both sides of the cable.
- Hang the upper winch housing support (LANRB057) on the bottom flange on the back of the baler as shown in Figure 10. Using a clamp on each side, secure the support to the baler and mark each of the four mounting holes.
- Using a 3/8" drill bit, drill through the outer two holes with the support still clamped to the baler.
- Remove the clamps and the support and drill through the inner two holes. Test fit the support to the drilled holes to ensure they will bolt together.



Figure 9

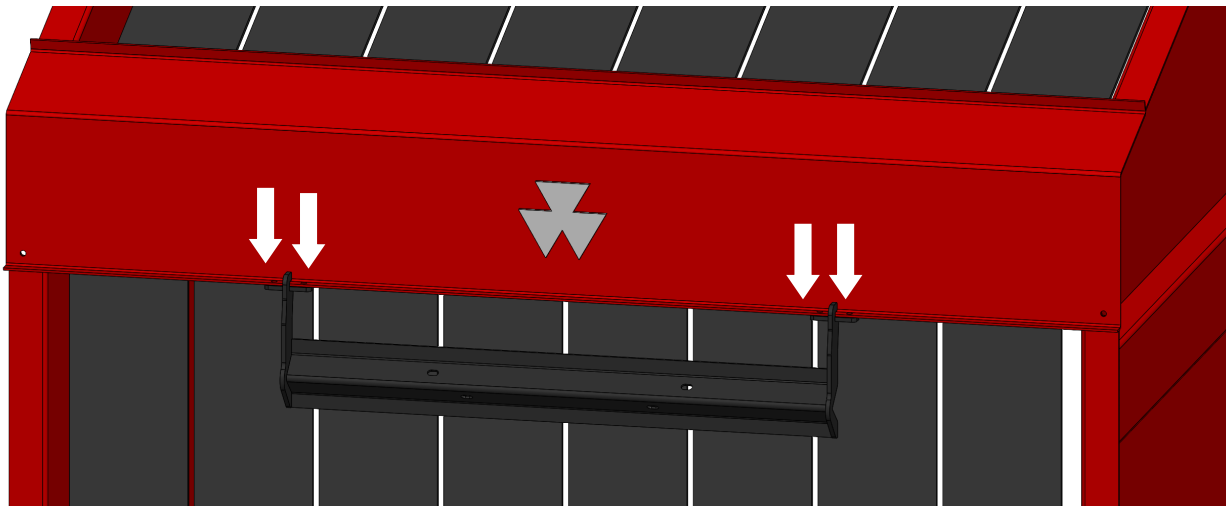


Figure 10

Kit Installation

Refer to Figures 11 & 12

20. Attach the winch housing supports (LANSR055 and LANSR057) to the winch housing (LANSR050) as shown with ten 3/8" x 3/4" carriage bolts (LANFK303) on the inside, and 3/8" serrated flange nuts (LAN3718) on the outside.

For 4' wide balers:

Cut 6" off the support members (LANRB055) as shown in Figure 12 with the red lines, and bolt each member in 6" farther at the next set of holes.

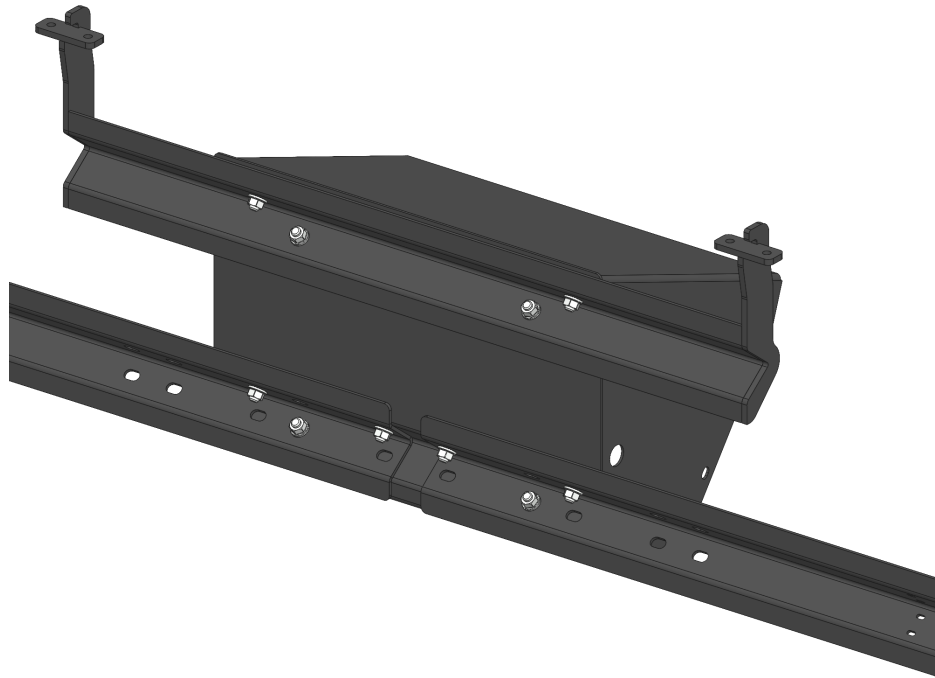


Figure 11

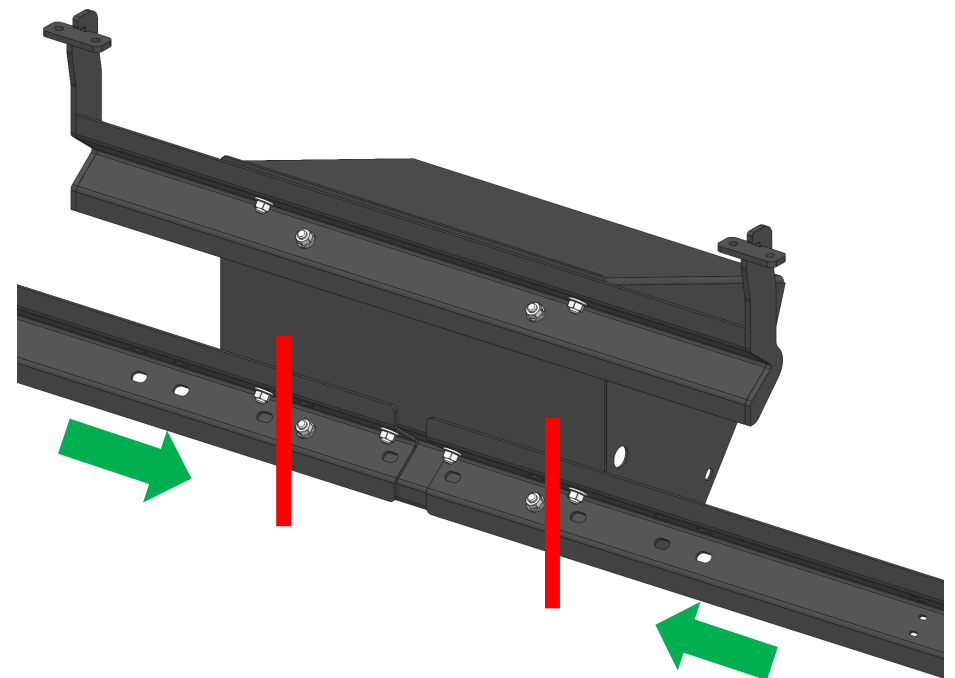


Figure 12

Kit Installation

Refer to Figures 13 & 14

21. Attach the cable roller arm (LANRB056) to the winch enclosure (LANRB050) by sliding the tubes together and bolting with 3/8" x 3/4" carriage bolts (LANFK303) and 3/8" serrated flange nuts (LAN3718).
22. *NOTE: To get slack in the cable, free spool the winch drum with hub lock on the left side of the winch. Be sure to re-lock the hub before operation.* Attach the cable guide roller (provided with the winch) to the roller arm using a 3/8" washer (LAN18000) under the head of a 3/8" x 1" bolt (LAN18A00) with a 3/8" serrated flange nut (LAN3718) on the top. Do this on each side.

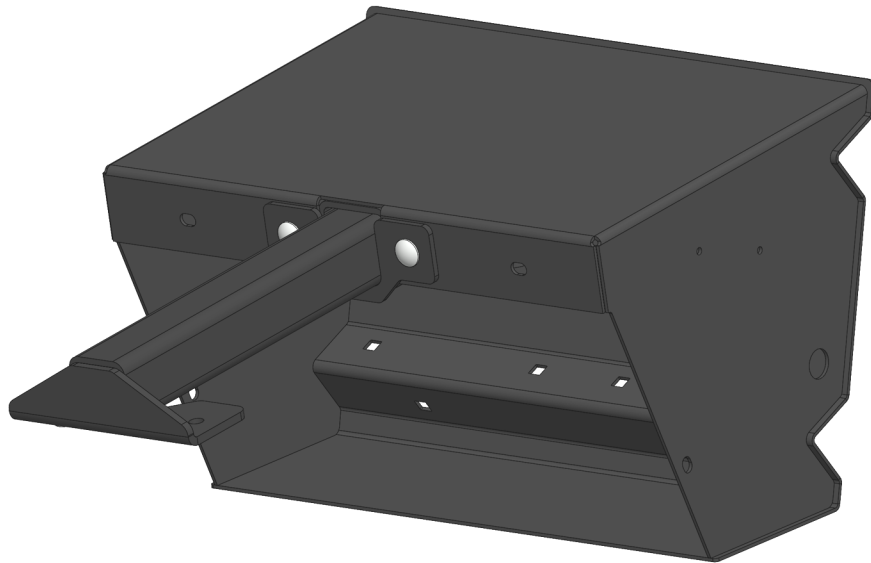


Figure 13

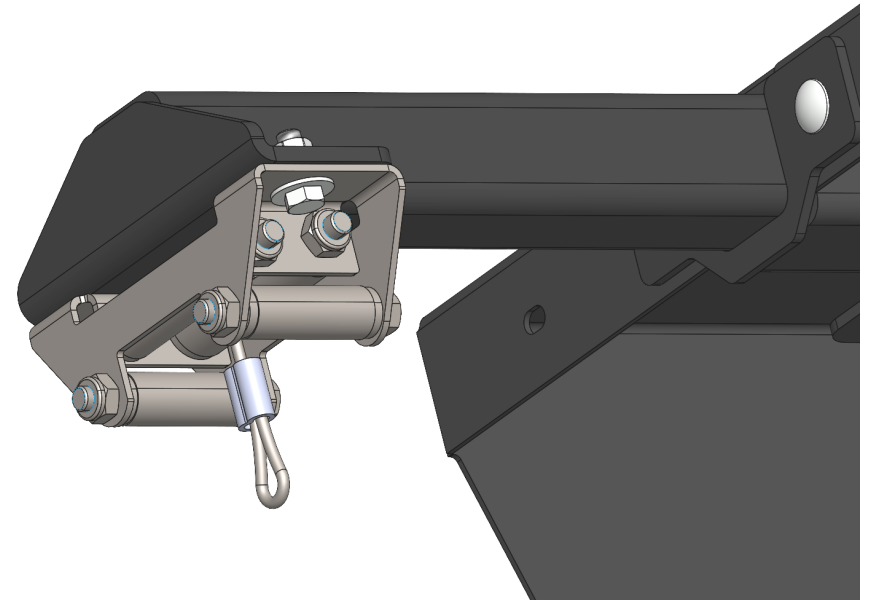


Figure 14

Kit Installation

Refer to Figures 15 & 16

23. Lift the entire assembly to the back of the baler to the previously drilled holes in Step 18 & 19.

24. Bolt through the baler flange with four 5/16" x 1" bolts (REDB203), washers (LAN1133) and serrated flange nuts (LANNAS2).



Figure 15



Figure 16

Kit Installation

Refer to Figures 17 & 18

25. Drill through the holes at the end of the support members (LANRB055) through the baler sheet metal.
26. Bolt the ends of the support member to the baler with two 5/16" x 1" bolts (REDB203), washers (LAN1133) and serrated flange nuts (LANNAS2).
27. Repeat steps 17 & 18 on the other side of the baler.



Figure 17



Figure 18

Kit Installation

Refer to Figures 19 & 20

28. Route the wiring harness (LANRBWH2) and the 4' secondary grounding wire to the right, securing them with a zip tie in the center of the support member LANRB055.
29. Cut the 4' black wire with enough length to reach the previously installed bolt. Strip the insulation back approximately 1/4" on the end of the black wire. Crimp and heat the 5/16" ring terminal (LAN3208) onto the black wire. Attach the new eyelet to the baler with the previously installed bolt, or the provided 1/4" thread forming bolt.
30. Begin routing the wiring harness LANRBWH2 up the side of the baler following the existing wiring harness, securing it along the way with zip ties (approx. every 18").

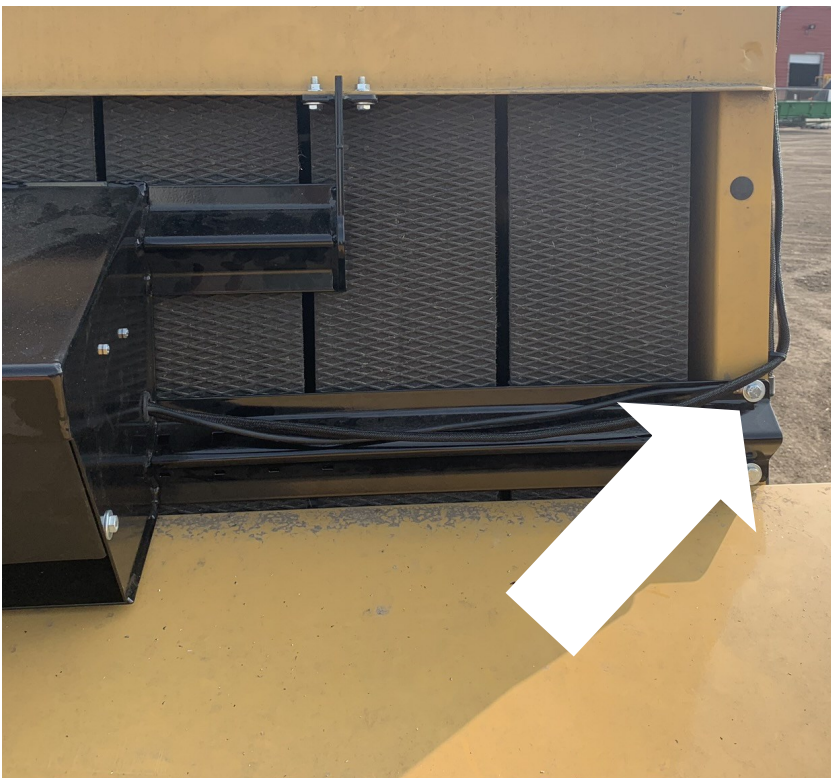


Figure 19



Figure 20

Kit Installation

Refer to Figures 21 – 23

31. Continue routing the wiring harness (LANRBWH2) into the top of the passenger side baler door, down the front to the cross tube and over to the center of the baler tongue.

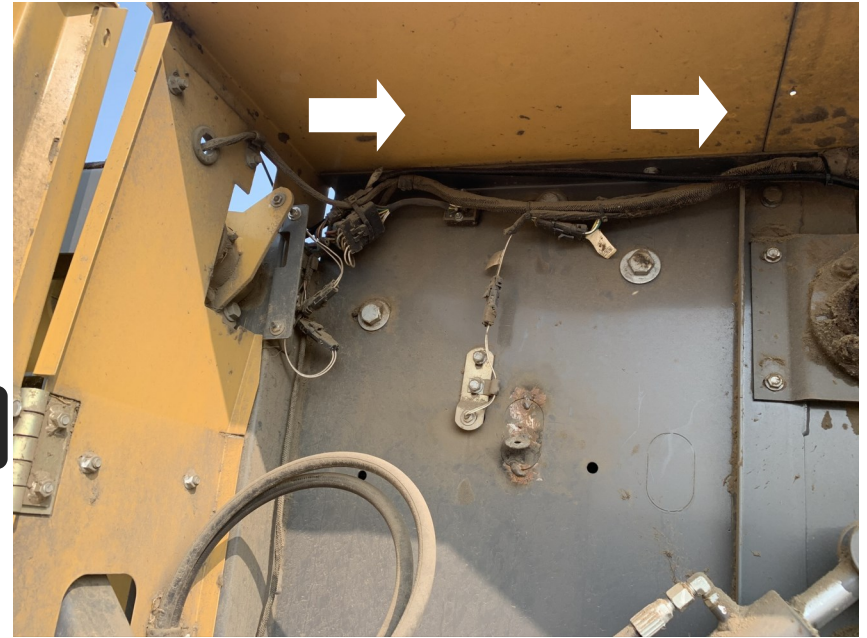


Figure 21



Figure 22

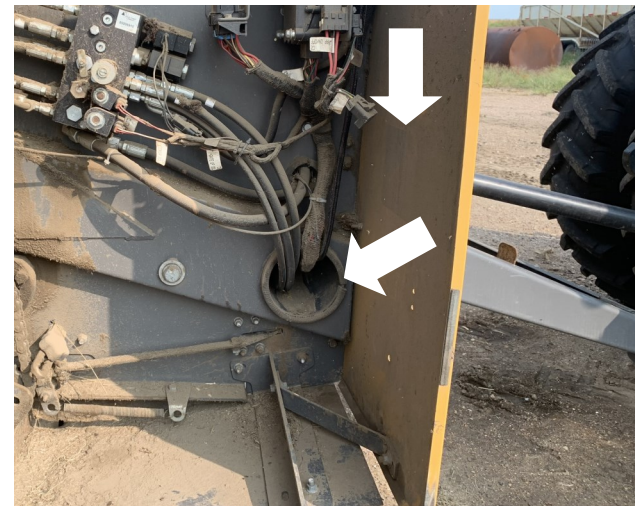


Figure 23

Kit Installation

Refer to Figures 24 & 25

32. Route the wiring harness up the baler tongue to the desired length with the other baler hoses and wiring. Secure the wiring harness with zip ties along the entire length.
33. Route the winch rocker switch harness to the left (driver side) and secure it in the center with a zip tie.



Figure 24

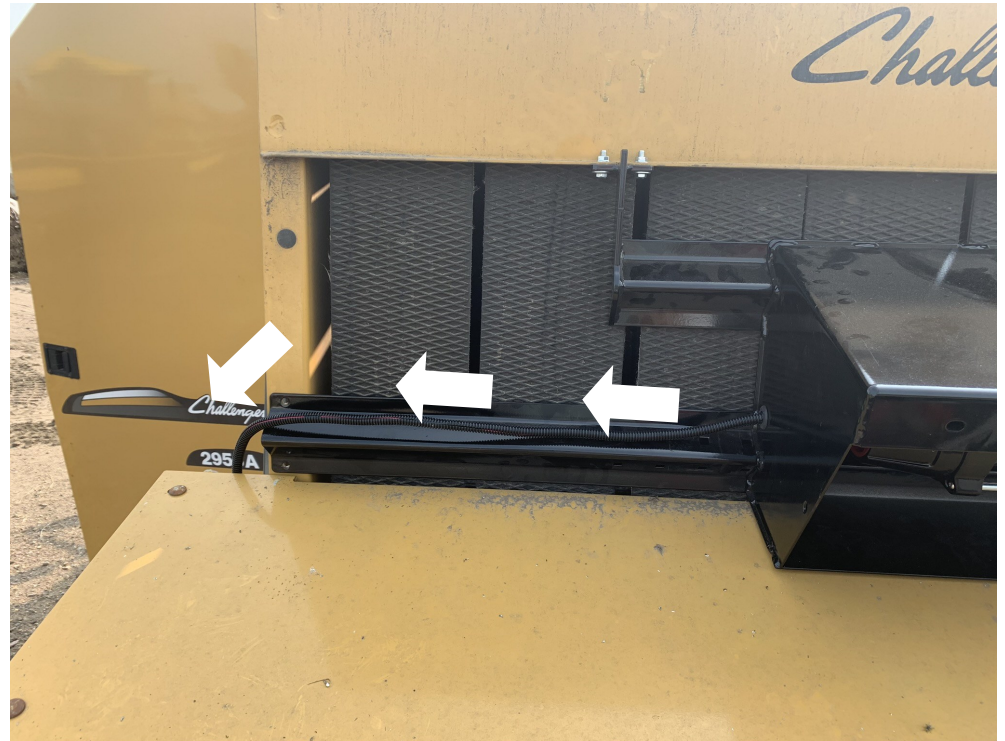


Figure 25

Kit Installation

Refer to Figures 26 - 28

34. At the location where the winch rocker switch now hangs on the front side of the net wrap bay area, measure down and mark 10" and 23 1/2" from the top edge.
35. Measure to the left 1 1/4" from the right edge and mark at both locations.



Figure 26



Figure 27



Figure 28

Kit Installation

Refer to Figures 29 - 31

36. Using a 3/16" drill bit, drill holes at both marks.
37. Using #10 x 1" bolts (LANFH1H2M), #10 SAE washers (LANF0EL2) and #10 nyloc nuts (LANF0DNU), attach magnets (LANMCHN40) in the previously drilled holes. **DO NOT OVER TIGHTEN**. The magnets will be used to hold the lifting hook (LANRB004) during storage.
38. Place the lifting hook (LANRB004) on the magnets and wrap the winch rocker switch around the lifting hook. Mark the location under the rocker switch while coiled tightly.
39. Drill and attach the final magnet to the baler to hold the rocker switch when not in use (See Figure 31).



Figure 29

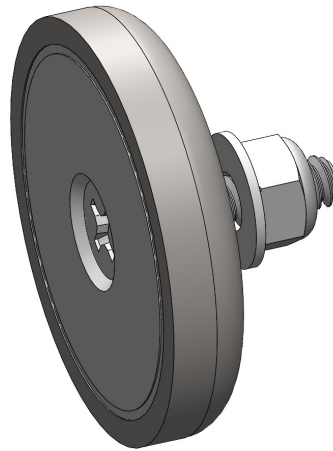


Figure 30



Figure 31

Kit Installation

Refer to Figures 32 & 33

40. In the center of the front face of the net wrap door above the slow moving vehicle sign, measure down 5 1/8" and 6 3/4".
41. Drill a hole using the 4" hole saw (LANFHB400) at each of the marks.
42. Using a sawzall, jig saw, cutoff grinder, etc., cut the triangle sections (lines shown below in red) left by drilling the two holes, in order to finish the slot.

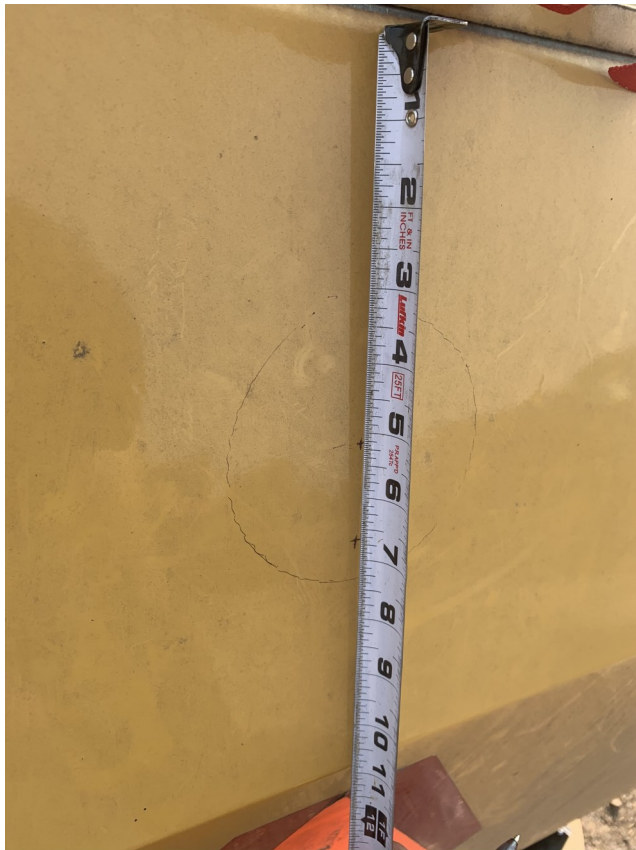


Figure 32



Figure 33

Kit Installation

Refer to Figures 34 & 35

43. Hold the hinged cover (LANRB054) centered over the slot cut in the net wrap door.
44. Mark the five hinge holes and drill through the net wrap door using a 3/16" drill bit.



Figure 34

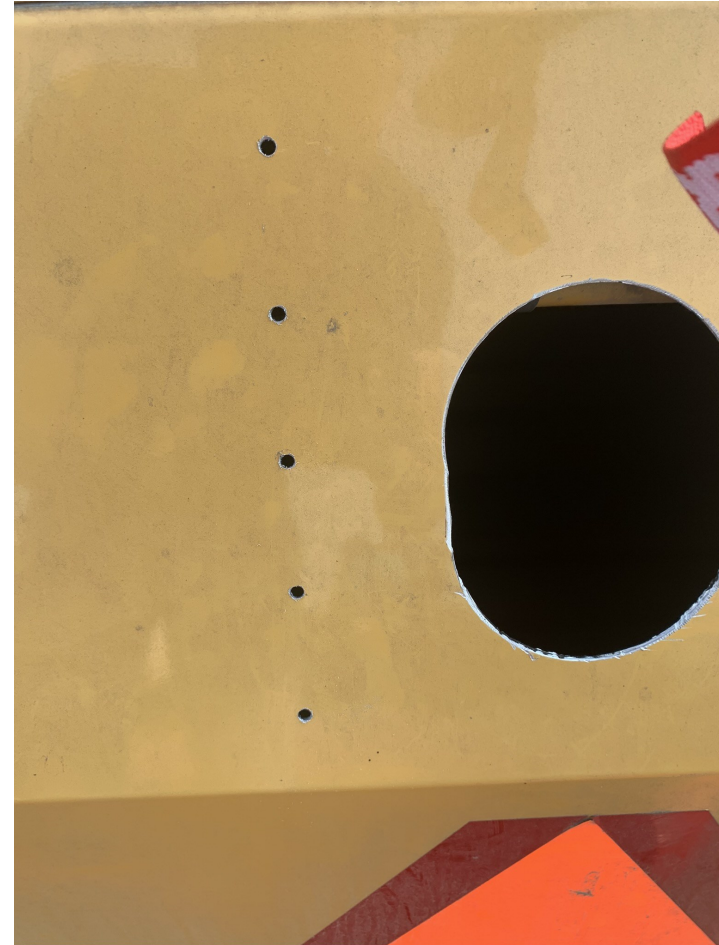


Figure 35

Kit Installation

Refer to Figures 36 - 38

45. Attach the hinged cover (LANRB044) to the net wrap door with five bolts (LANF92210A148) and nuts (LANF90631A007). Use the washer strip (LANRB009) under the nuts on the inside of the door shown in Figure 37.
46. Drill clearance holes in the net wrap door for the back side of the rivets (shown with white circles in Figure 38). **Note: This will allow the hinged cover to close completely and the hinge fasteners to be tightened correctly.**
47. Check that hinge fasteners are tight.



Figure 36



Figure 37



Figure 38

Kit Installation

Refer to Figures 39 - 41

48. With the hinged door flipped closed, temporarily place the snap clip (LANAH161580) in the right hand area as shown and mark the center hole of the snap clip.
49. With the hinged door flipped open, temporarily place the snap clip (LANAH161580) in the left hand area as shown and mark the center hole of the snap clip.
50. Drill at these two locations with a 1/4" drill bit and attach the snap clips with one screw (LANF92949A242), washer (REDWU51) and nut (LANFODNU) per snap clip.



Figure 39



Figure 40



Figure 41

Kit Installation

Refer to Figures 42 & 43

51. Install the winch cover (LANRB052) on the winch enclosure (LANRB050) with four 5/16" washers (LAN1133) and 5/16" X 3/4" bolts (LANB203). Tighten all bolts.
52. On the back of the baler (shown in Figure 43) below the factory spot welds, drill a 3/8" hole on both sides through both layers of sheet metal and bolt together with a 5/16" x 3/4" bolt, washer and serrated flange nut (LANNAS2) on each side.
53. Starting at the rear of the tractor with the connector end of LANRBWH1 at the desired location, route the wiring harness to the tractor battery and connect the ring terminals to the battery. **Note: Be sure to connect to 12V DC. This may be achieved differently depending on the battery configuration. If unsure of the voltage, verify 12V at the connecting points with a multimeter.** Ensure the wiring harness is secured and clear of sharp or rotating components along the entire length. **Note: Extra tractor harnesses are available if operator uses multiple tractors to operate baler with Net Wrap Loader installed.**



Figure 42

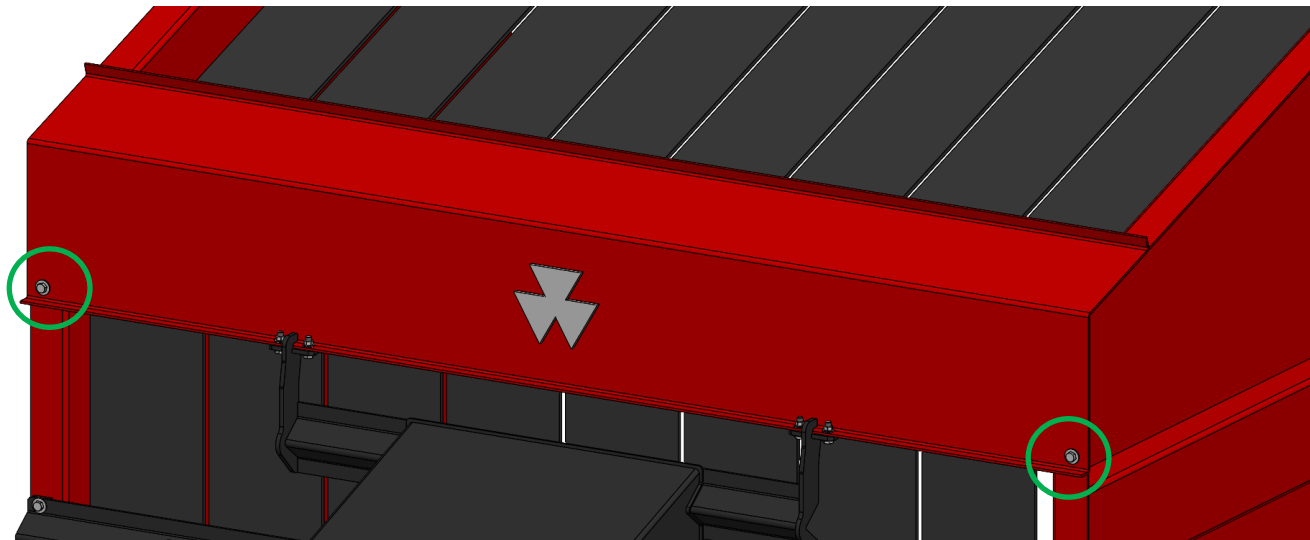


Figure 43



For further technical assistance,

Call Lankota Inc. at:

1-866-526-5682