

LANRB19275

Installation Instructions

Lankota Net Wrap Assist for Vermeer Balers

(505M Classic, 504N, 504M, 504R Classic, 504R Premium, 504R Signature, 604M, 604SM, 604N, 604R Classic, 604R Signature, 605M, 605SM, 605N)

LANKOTA®

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Numerical Parts List

Part Numbers	Description	Qty
LANRB004	Net Wrap Lifting Hook	1
LANRB008	Magnet Plate	1
LANRB009	Hinge Backer Plate	1
LANRB040	Winch Enclosure	1
LANRB041	Cable Roller Mounting Arm	1
LANRB042	Winch Cover	1
LANRB044	Door Assembly	1
LANRB045	Drilling Template	1
LANMCHN40	1.5" Magnet	3
LANBBSIGN	Slow Moving Vehicle Sign	1
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	4
LAN18A	3/8" x 1" Carriage Bolt	3
LAN3718	3/8" Serr Flange Nut	7
LANB203	5/16" x 3/4" Hex Bolt	4
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	2
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

					
LANRB004 (1)	LANRB008 (1)	LANRB009 (1)	LANRB040 (1)	LANRB041 (1)	LANRB042 (1)
					
LANRB044 (1)	LANRB045 (1)	LANMCHN40 (3)	LANBBSIGN (1)	LANAH161580 (2)	LANRBWH1 (1)
			START OF HARDWARE BAG		
LANRBWH2 (1)	LANRBWH3 (1)	LAN101025 (1)		LAN8863T28 (3)	LANF90631A007 (5)
					
LANF92210A148 (5)	LANF06WS (2)	LANF92949A537 (2)	LAN9657K21 (1)	LAN9600K321 (2)	LAN14M7298 (1)

Pictorial Parts List

					
LAN1133 (4)	LAN18A (4)	LAN3718 (7)	LANB203 (4)	LANEJRN (2)	LANF0DNU (5)
					
LANFH1H2M (3)	LANFK303 (4)	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 (LANRB001), 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 4 & 5

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 right side of the winch enclosure (LANRB050), and to the winch relay.
8. Route the eye terminals on LANRBWH2 and 4' black grounding wire in through the hole in the left side of the winch enclosure as shown in Figure 4, behind the square tube, and over 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 4

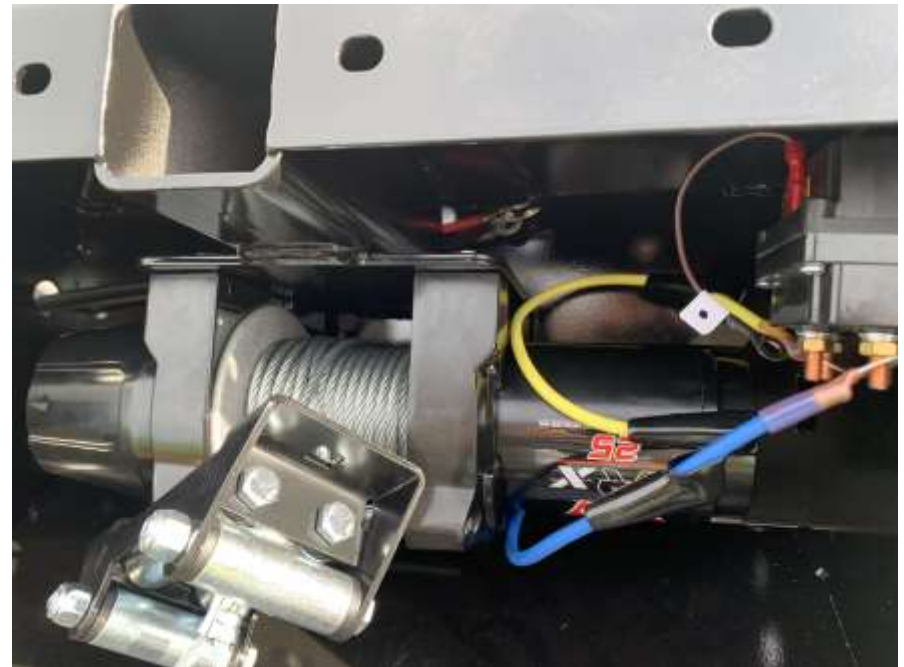


Figure 5

Kit Installation

Refer to Figures 6 & 7

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.

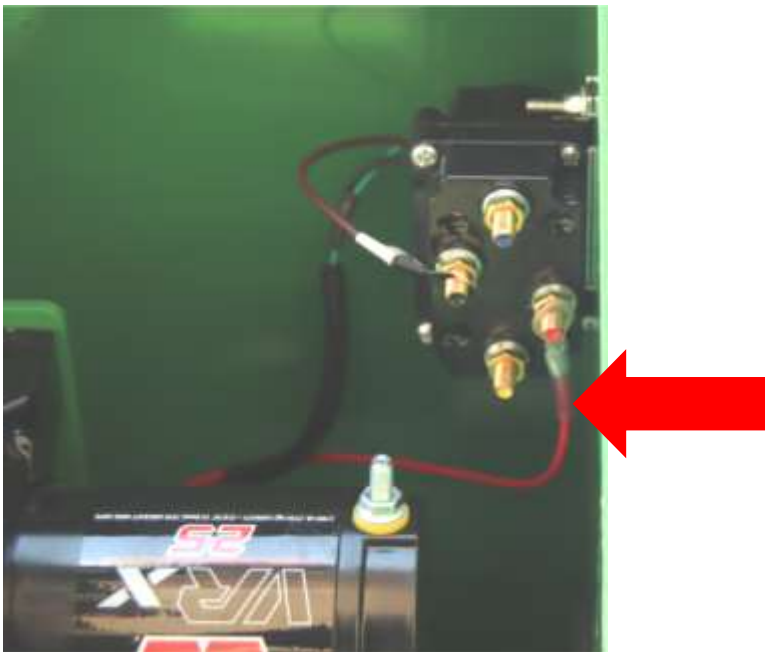


Figure 6



Figure 7

Kit Installation

Refer to Figures 8 & 9

15. On the back of the baler, above the net wrap door, mark the center of the light bar bracket at the bend shown with a red arrow below.
16. Using the drilling template (LANRB045), line up the front edge flush with the vertical portion on the light bar bracket. Also, line up the previously marked center line of the baler with the notch in the bottom of the drilling template.
17. Mark the four holes in the template and drill the center of the marks with a 7/16" drill bit. **Note: When drilling the mounting holes, ease the pressure off the drill bit before drilling all the way through to avoid drilling into the baler belting, etc.**

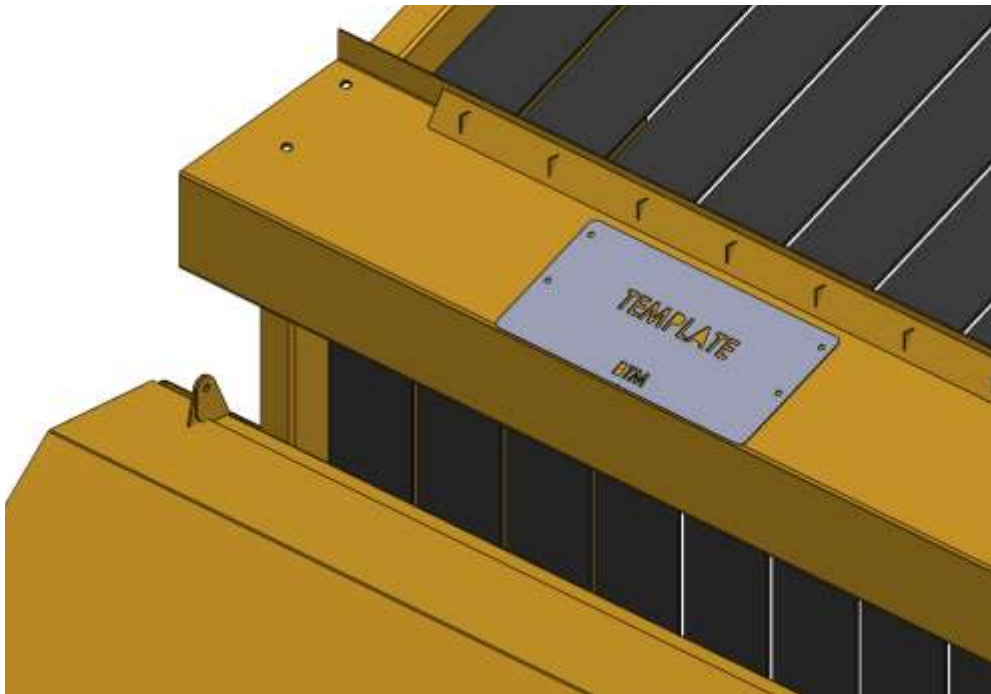


Figure 8

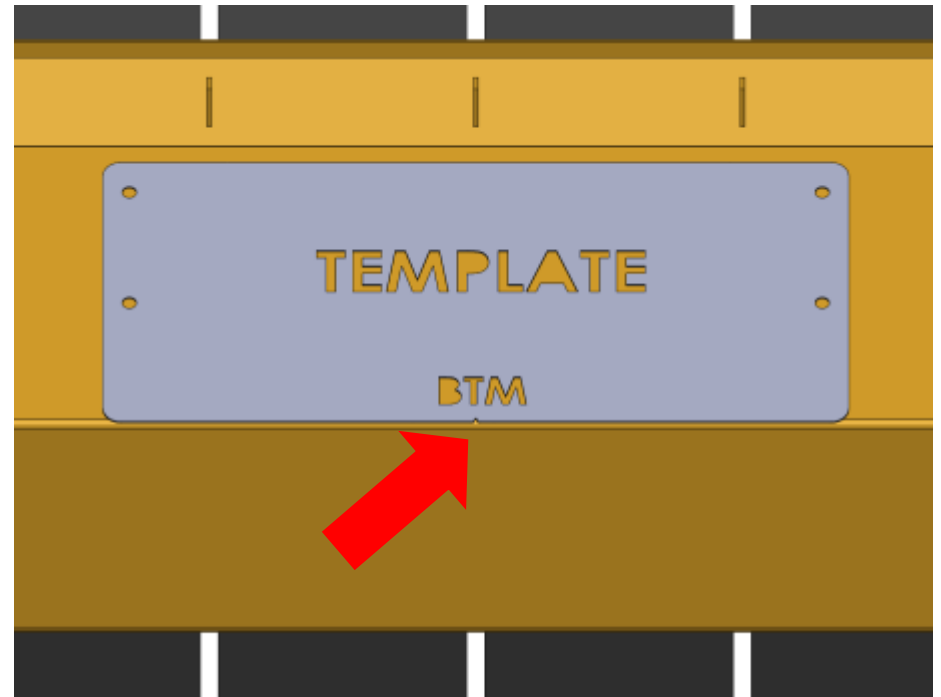


Figure 9

Kit Installation

Refer to Figures 10 & 11

18. Attach the winch enclosure (LANRB040) to the back of the baler through the previously drilled holes with 3/8" x 1" serrated flange bolts (LANFM7KV) and 3/8" serrated flange nuts (LAN3718). **Note: Be sure the bolt head is on the inside, so the bolts are pointing away from the baler belts.** If more space is required, this section of the baler can be removed temporarily for mounting of the winch enclosure.
19. Route the winch rocker switch harness to the right (passenger side) of the baler and secure it with a zip tie. This can be done by drilling a small (3/16") hole near the edge of the sheet metal.



Figure 10



Figure 11

Kit Installation

Refer to Figures 12 & 13

20. On the front (passenger) side of the net wrap door, measure down from the top and mark at 4.5" and 18". Measure from the left side toward the center of the baler, 3 3/4".
21. Check inside the net wrap door to ensure proper clearance if the marks were to be drilled. Shift the holes left or right if necessary, while maintaining 13 1/2" between them. Drill a 3/16" hole at both marks.



Figure 12



Figure 13

Kit Installation

Refer to Figures 14 - 16

22. 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.



Figure 14



Figure 15



Figure 16

Kit Installation

Refer to Figures 17 & 18

23. Secure the winch rocker switch harness with a loop clamp (LAN8863T28) and 3/8" serrated flange bolt (LANFM7KV) and 3/8" serrated flange nut (LAN3718) through the existing open hole (shown below with a red arrow).
24. Place the net wrap lifting hook (LANRB004BLK) on the magnets and coil the rocker switch around it as shown below.
25. With the rocker switch pulled snug, mark and drill a 3/16" hole directly behind the rocker switch.
26. Install the last magnet (LANMCHN40), as done is **Step 22**, to stow the winch rocker switch.



Figure 17



Figure 18

Kit Installation

Refer to Figures 19 & 20

27. Remove the slow moving vehicle sign from the net wrap door and draw a straight line between the two mounting holes with a marker.
28. Hold the hinged cover (LANRB044) over the original SMV sign location while keeping the top of the hinge just below the bend on the net wrap door (shown with a red arrow in Figure 20). Center the hinged cover from side to side by looking through the hole shown with a white circle below, to see the vertical line marked in **Step 27**.
29. Mark the five hinge holes and drill through the net wrap door using a 3/16" drill bit.



Figure 19



Figure 20

Kit Installation

Refer to Figures 21 - 23

30. 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 22.
31. Drill clearance holes in the net wrap door for the back side of the rivets (shown with white circles in Figure 23). **Note: This will allow the hinged cover to close completely and the hinge fasteners to be tightened correctly.**
32. Check that hinge fasteners are tight.



Figure 21

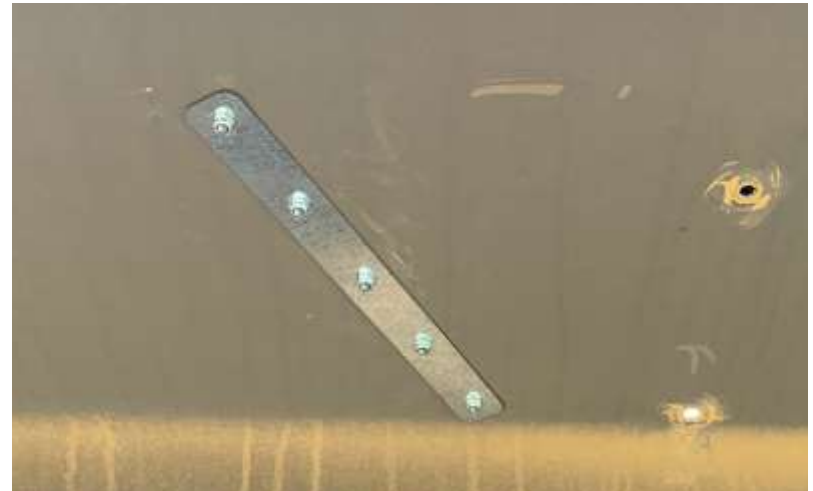


Figure 22



Figure 23

Kit Installation

Refer to Figures 24 & 25

33. Attach the original or new SMV sign to the hinged door (LANRB044) with two screws (LANF92949A537) and nuts (LANEJRN).
34. With the hinged door flipped down, temporarily place the snap clip (LANAH161580) in the bottom right hand area as shown and mark the center hole of the snap clip.
35. With the hinged door flipped up, temporarily place the snap clip (LANAH161580) in the top left hand area as shown and mark the center hole of the snap clip.
36. 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.

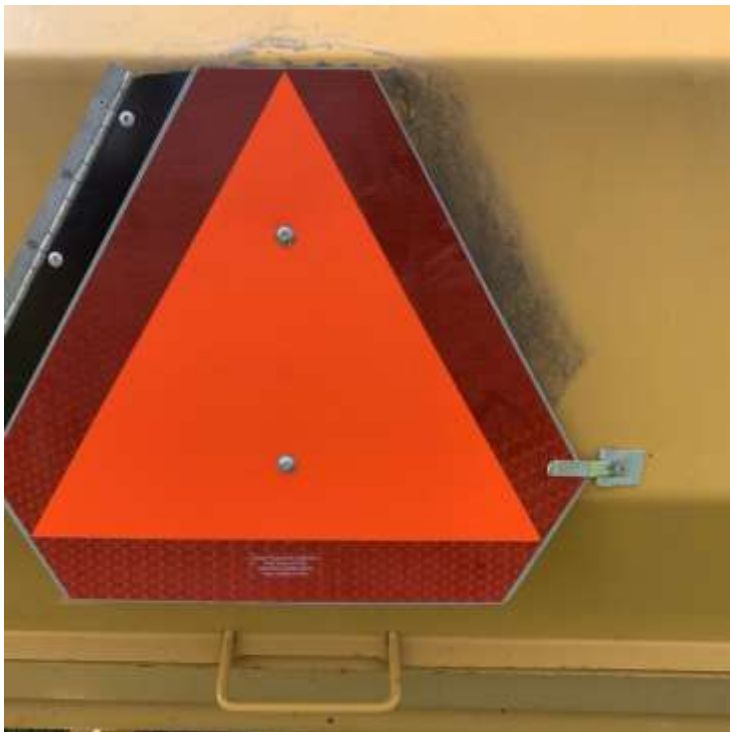


Figure 24



Figure 25

Kit Installation

Refer to Figures 26 & 27

37. In the center of the front face of the net wrap door, measure down 3" and drill a hole using the 4" hole saw (LANFHB400).
38. Typically a single 4" hole is enough clearance, but a slot can be cut if more clearance is desired for the winch hook. To do so, measure down 6" from the top edge of the net wrap door and drill an additional hole. 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 26

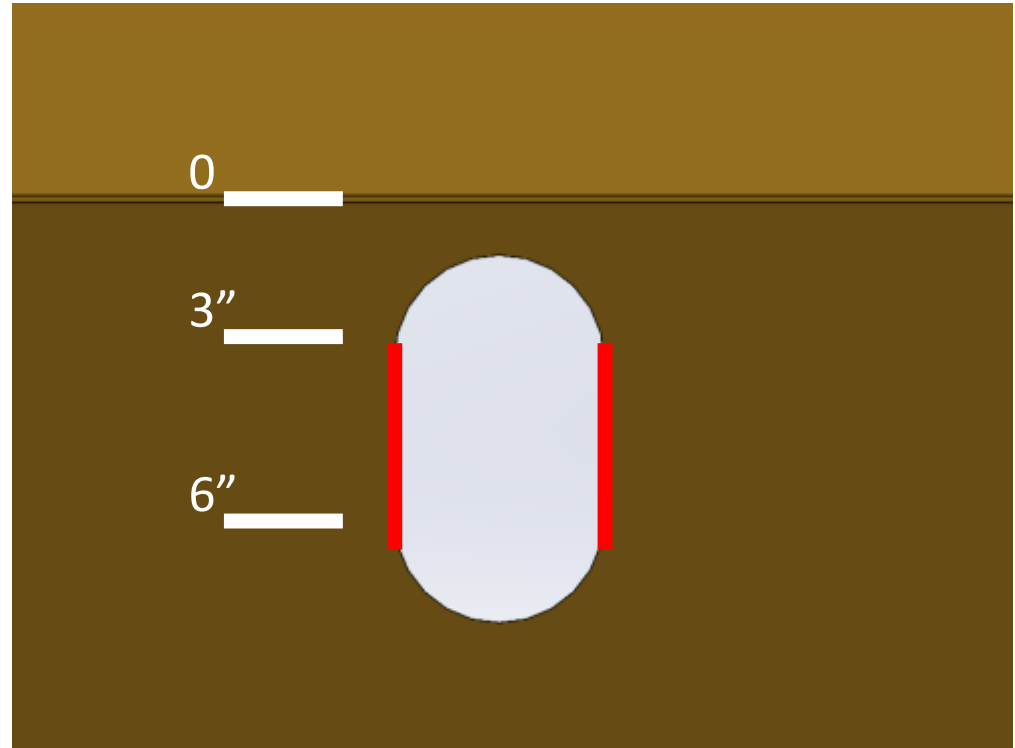


Figure 27

Kit Installation

Refer to Figures 28 & 29

39. Attach the cable roller arm (LANRB041) to the winch enclosure (LANRB040) by sliding the tubes together and bolting with 3/8" x 3/4" carriage bolts (LANFK303) and 3/8" serrated flange nuts (LAN3718).
40. *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 28

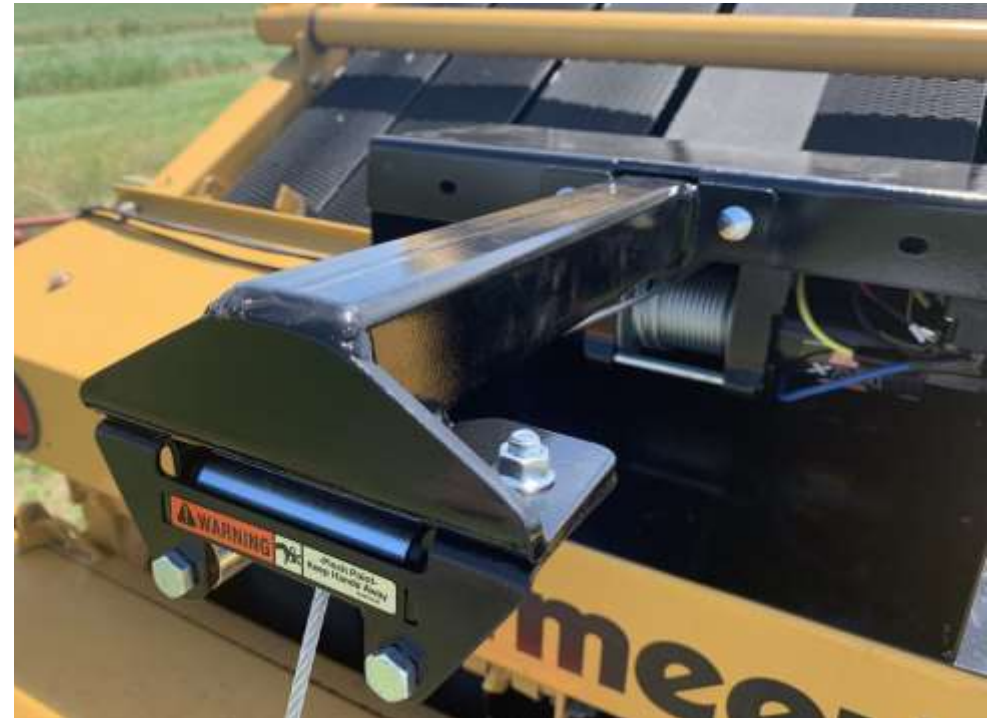


Figure 29

Kit Installation

Refer to Figures 30 & 31

41. Slide the spring (LAN9657K21) over the loop at the end of the cable.
42. 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.



Figure 30



Figure 31

Kit Installation

Refer to Figures 32 & 33

43. Install the winch cover (LANRB042) on the winch enclosure (LANRB040) with four 5/16" washers (LAN1133) and 5/16" X 3/4" bolts (LANB203). Tighten all bolts.
44. Route the wiring harness LANRBWH2 and the 4' black secondary grounding wire to the left (driver) side of the baler and secure them at the edge with a zip tie by drilling a 3/16" hole at the edge of the sheet metal.



Figure 32



Figure 33

Kit Installation

Refer to Figures 34 & 35

45. Attach the 4' secondary grounding wire to the baler by one of the following methods (shown in Figure 34).
 - A. Leaving the wire the full length, and attach the eyelet to the baler at a desired location by drilling a 3/16" hole and using the 1/4" thread forming bolt (LANPRVW).
 - B. Cut the 4' black wire with enough length to reach an available existing bolt, or a desired location for the 1/4" thread forming 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 an existing bolt, or the provided 1/4" thread forming bolt.
46. 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 34



Figure 35

Kit Installation

Refer to Figures 36 - 38

47. Continue routing the wiring harness over the baler door pivot, under the driver side baler door, past the drive chain, across the front center cover, and down the baler tongue. Coil the excess length under the side door and secure the entire harness with zip ties.
48. 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 36



Figure 37



Figure 38



**For further technical assistance,
Call Lankota Inc. at:
1-866-526-5682**

