

X2/MKX2/HX210/13 – ELECTRIC WINCH – PRODUCT RELEASE

ECN ID #	ECN4430
DATE	December 3, 2024
BRAND	AGI, Westfield, Hutchinson, Mayrath
MODEL	MKX2/X2/HX2 – 10"/13" Series Augers
DATE RANGE	
DETAILS	A new electric winch kit is available for MKX2/X2/HX2 10" & 13" augers for lifting of the swing hopper. Kit information and assembly instructions are included below.

The following stand-alone kits are available which can be installed on basic augers or augers equipped with hydraulic power swings:

- 05-A532RD (KIT, ELECTRIC HOPPER WINCH, 10")
- 05-A537RD (KIT, ELECTRIC HOPPER WINCH, 13")

The following add-on kits are available that can be installed & integrated into the receiver of existing augers equipped with electric power swings:

- 05-A538RD (KIT, ADD-ON ELEC HOPPER WINCH, 10")
- 05-A539RD (KIT, ADD-ON ELEC HOPPER WINCH, 13")

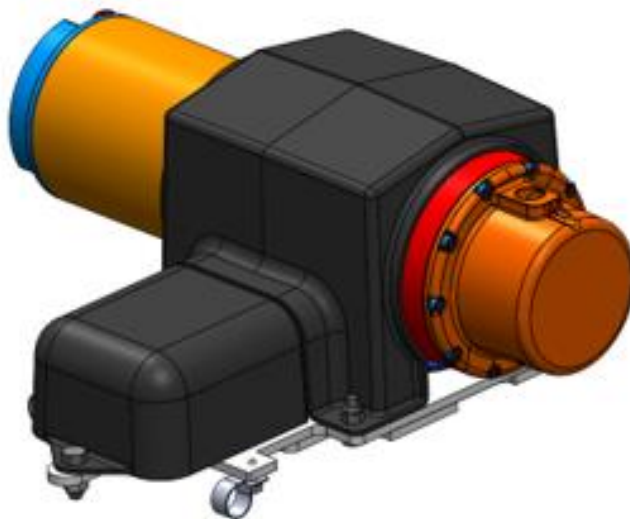


Figure 1: Electric Winch Assembly

Tools Required:

- Impact Gun
- 3/8" Socket for impact gun
- 1/2" socket for ratchet
- 5/16" wrench
- Twist tie hook

SECTION 1: Standalone Kits (05-A532RD and 05-A537RD):

Applicable to 10" and 13" auger series with electric hopper winch installation.

Steps for Standalone kits installation:

Step 1: Install the Electric Winch

- For 10" series (MKX210, X210, HX210):
 - Install the pulley guide onto the lift arm (see Figure 2). Remove winch guard before installing winch onto mounting plate. Ensure that the winch cable (not shown) feeds through the two lift arm pulleys (at the top of the lift arm and at the pulley guide).

1	Winch mounting plate	5	Pulley guide
2	Electric Winch	6	Bolt, ½" X 2-1/2"
3	Flat washer, 3/8"	7	Locknut, ½"
4	Locknut, 3/8"	8	Lift Arm
9	Winch Guard		

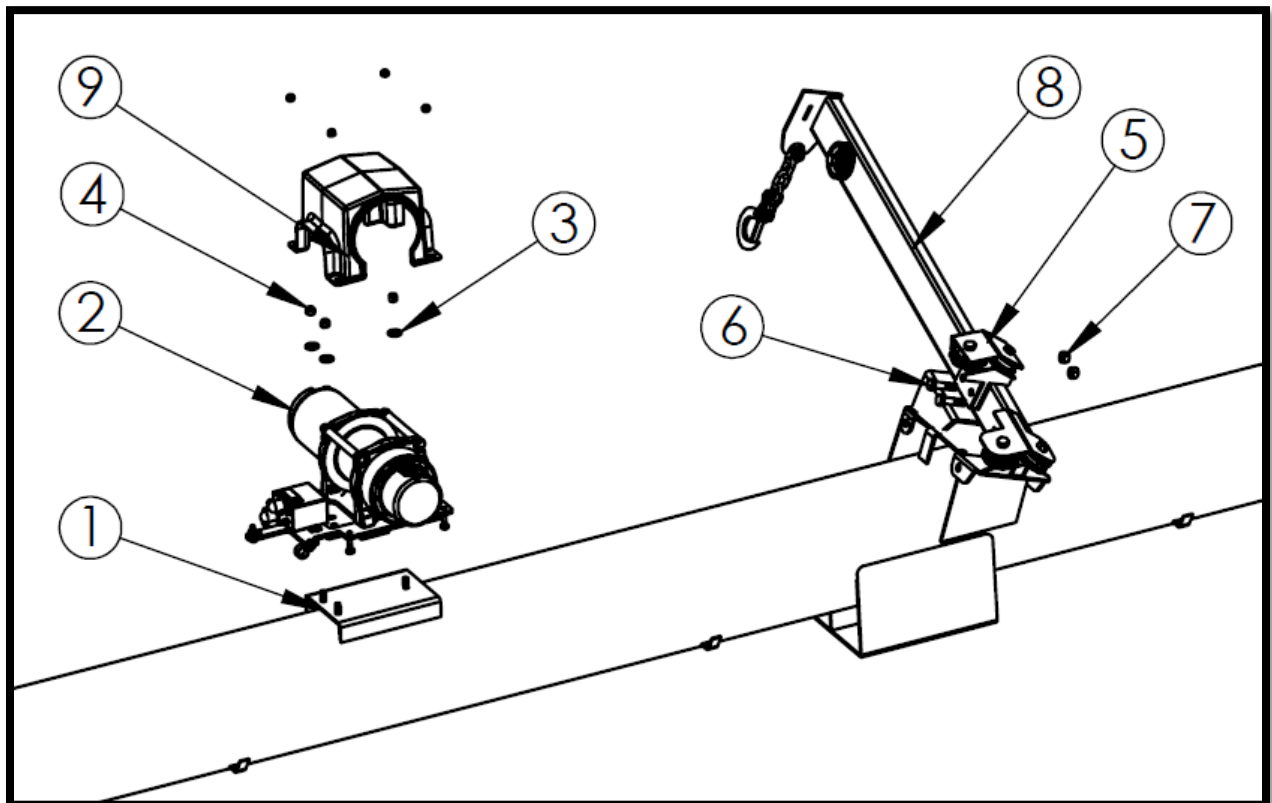


Figure 2: Installing the Electric Winch (MKX210, X210, HX210)

- **For 13" series (MKX213, X213, HX213):**

- Remove winch guard before installing winch onto mounting plate. Ensure that the winch cable (not shown) feeds through the three lift arm pulleys (at the top of the lift arm and at the lift arm base) as shown in Figure 3.

1	Winch mounting plate	4	Locknut, 3/8"
2	Electric Winch	5	Winch Guard
3	Flat washer, 3/8"		

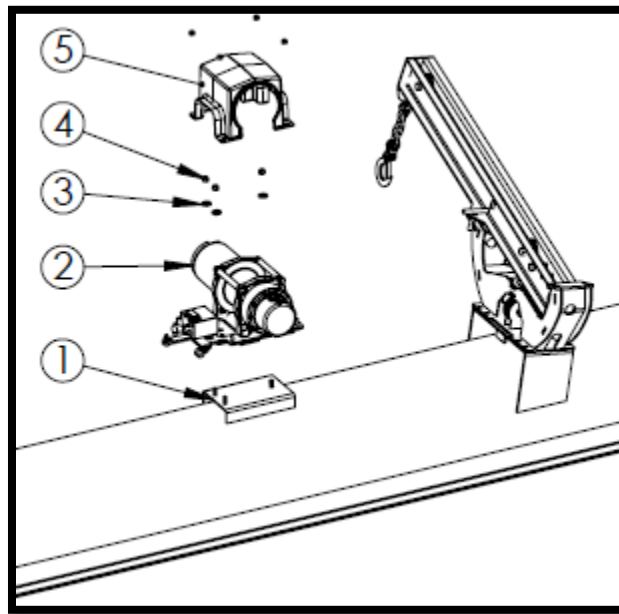


Figure 3: Installing the Electric Winch (MKX213, X213, HX213)

Step 2: Mount electric winch switch bracket assembly (203546) onto boot as shown in Figure 6. This switch in Figure 4 can manually lift winch "UP" and "Down".

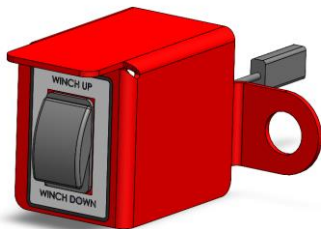


Figure 4

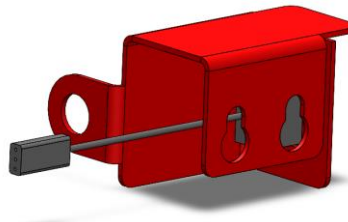


Figure 5

Step 3: Route the winch control harness (203535) to the boot as shown in Figure 6 and connect it to tractor harness and boot switch as shown in Figure 7 & Figure 8. Fasten Harnesses to cable clamps after connecting.

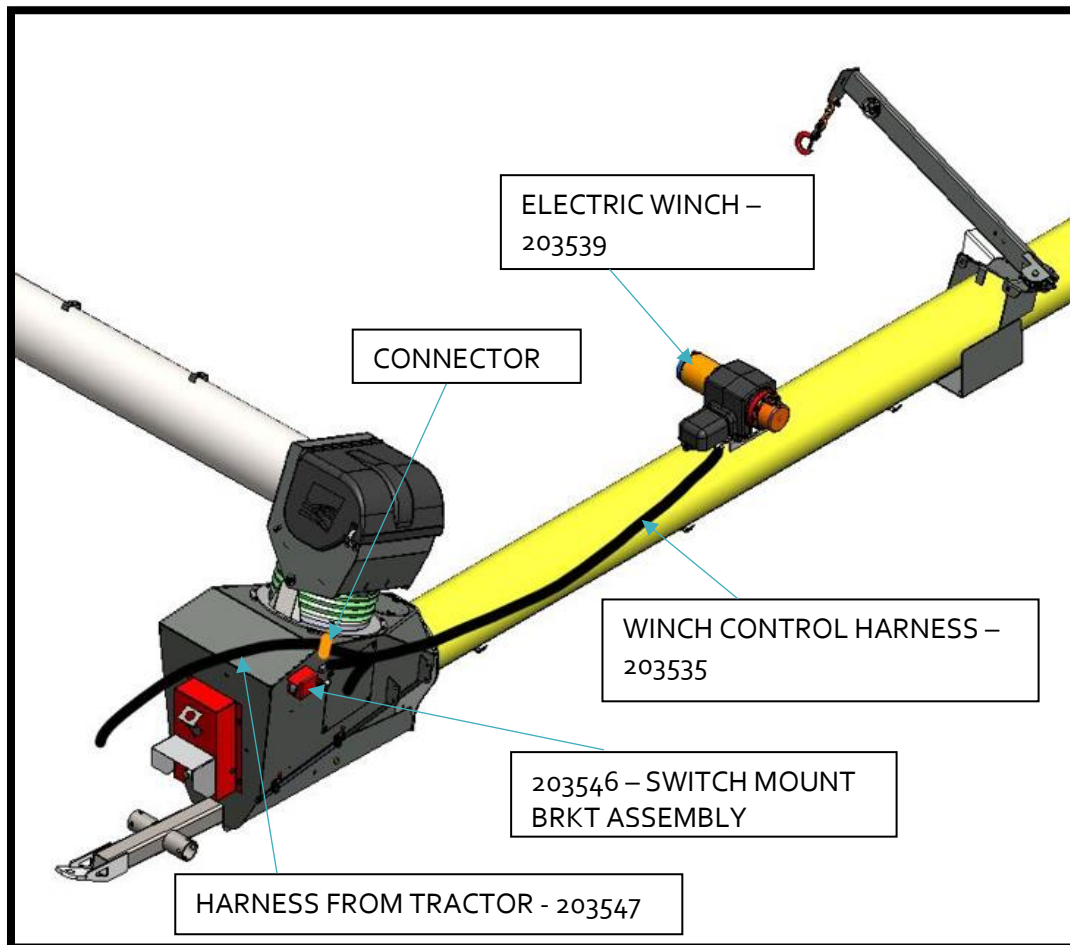


Figure 6: Harness routing from Winch to Boot to tractor

Step 4: Battery connections (Tractor Harness)

- For Tractor to boot harness (203547) as labelled, connect the end opposite the quick – connect to the battery and chassis ground:
 - Attach the positive wire directly to the positive terminal on the tractor battery (the positive wire has a circuit breaker on it) as shown in Figure 7
 - Attach negative wire to tractor chassis ground point (assuming that the tractor battery is also grounded to the chassis).

Caution: If these electrical cables are not hooked up properly the electric controller will be damaged.

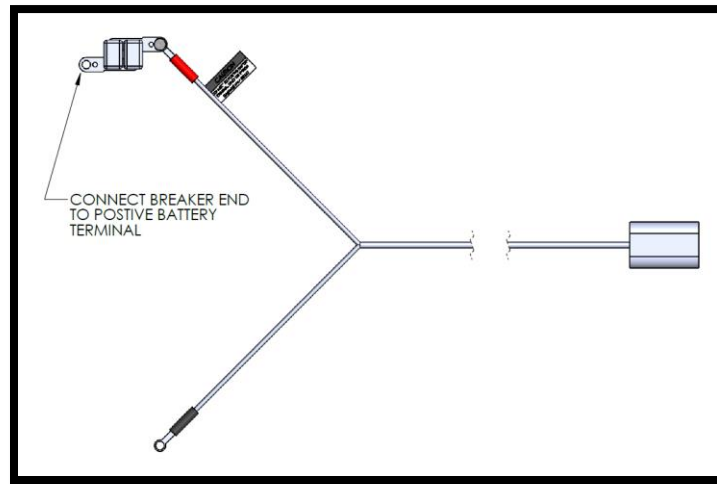


Figure 7: Tractor to Boot Harness

Step 5: Harness connections for Standalone kits:

- Attach tractor wire harness (203547) quick connect to the winch control harness (203535) quick connect battery connector 50A (labelled as END #1) as shown in Figure 8.
- Connect quick connect of E-winch switch assembly (203546) on the boot to END#3 of winch control harness (203535) as shown in Figure 8.

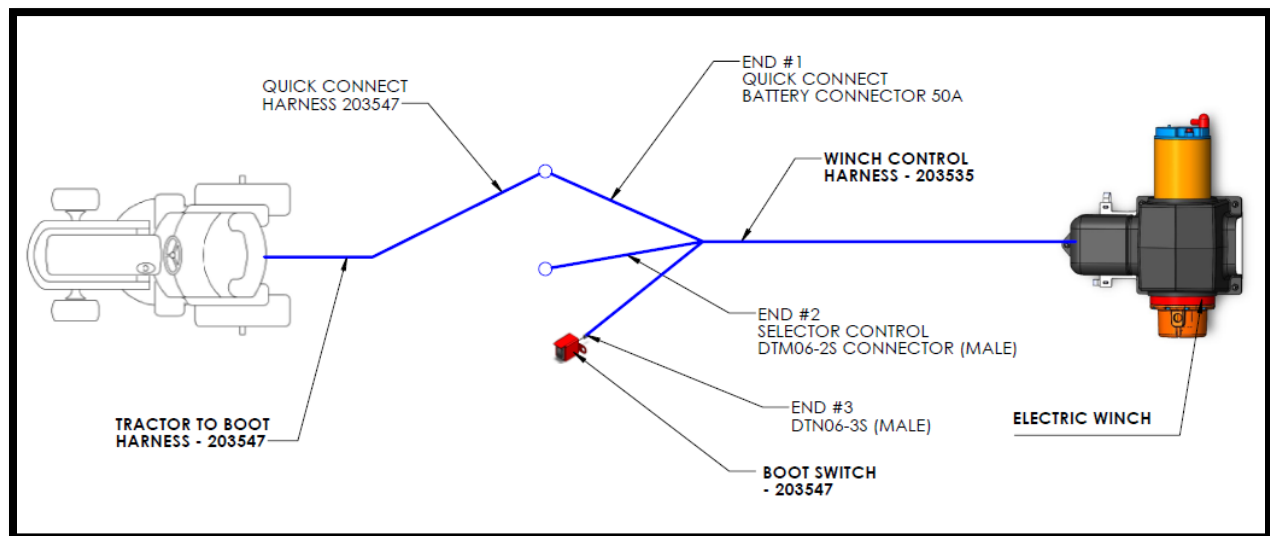


Figure 8: Harness Connections of Tractor to boot to winch

SECTION 2: Add-On Kits (05-A538RD and 05-A539RD):

Applicable to 10" and 13" auger series when integrated with an existing electric power swing.

Steps for Add-On kits installation:

Step 1: Install the Electric Winch

- Follow the same winch installation process as outlined for standalone kits (Step 1).

Step 2: Install the Boot Switch

- Follow the same boot switch installation process as outlined for standalone kits (Step 2).

Step 3: Route the winch control harness (203535) and boot to swing harness (203536) to the boot as shown in Figure 9 and connect both to tractor harness and boot switch as shown in Figure 10. Fasten Harnesses to cable clamps after connecting.

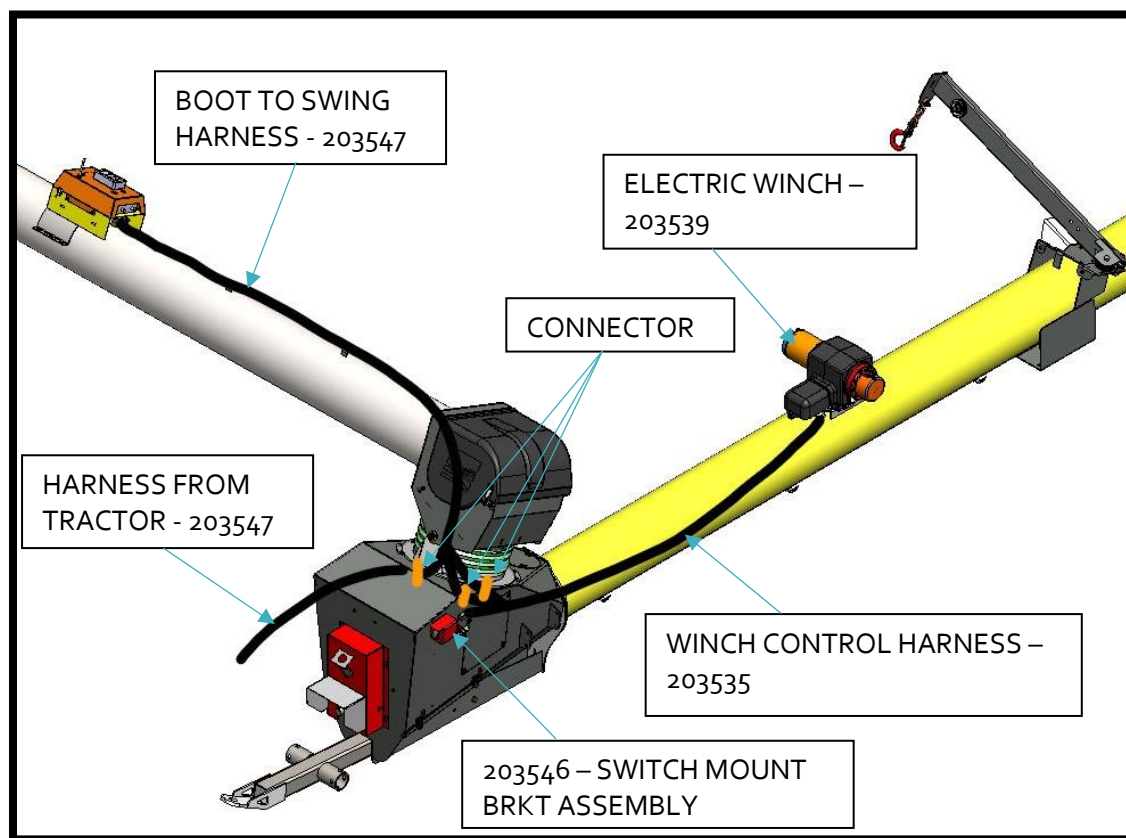


Figure 9: Harness routing from Tractor to Boot to Receiver & Electric Winch

Step 4: Battery connections (Tractor Harness)

- Follow the same tractor battery connections process as outlined for standalone kits (Step 4).

Step 5: Wiring Connections for Add-On Kits

- Attach tractor wire harness (203547) quick connect to the receiver cable (203536) quick connect battery connector 50A (END #1) as shown in Figure 10.
- Attach winch control harness (203535) quick connect battery connector 50A (END #1) to the quick connect battery connector 50A with cap (END #3) of boot to swing harness (203536) as shown in Figure 10.
- Connect selector controls connectors male/female (END #2) of both harnesses, 203535 and 203536 as shown in Figure 10.
- Connect quick connect of E-winch switch (203546) on the boot to END#3 of winch control harness (203535) as shown in Figure 10.

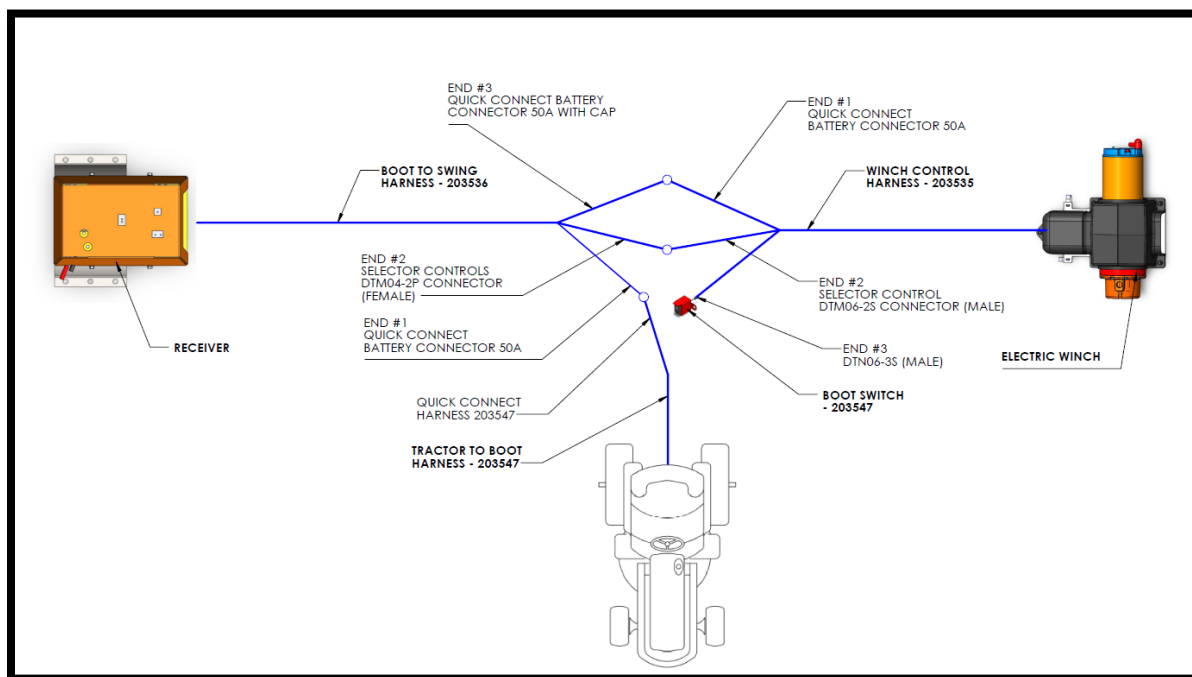


Figure 10: Harness connections of Tractor to boot to winch & receiver

STEP 6: Assembly instructions for Electric Winch Receiver:

- Take part #203540RD/203542RD (10"/13" RECEIVER TUBE MOUNT) and Part #20135 (RECEIVER, REMOTE CONTROL – LODAR), use #14 X 5/8" Sheet Metal Screw (19274) to mount Receiver (20135) onto bracket (203540RD/203542RD) using impact gun with 3/8" socket as shown in Figure 11.

- b. Use Pliers to cut the clip holding wires together on Receiver. Unscrew nut and washer on end of antenna cable to be able to fit it through hole. Route antenna wire inside Receiver tube mount as shown in Figure 12. Attach nut and washer back onto screw to secure through hole using 5/16" wrench.

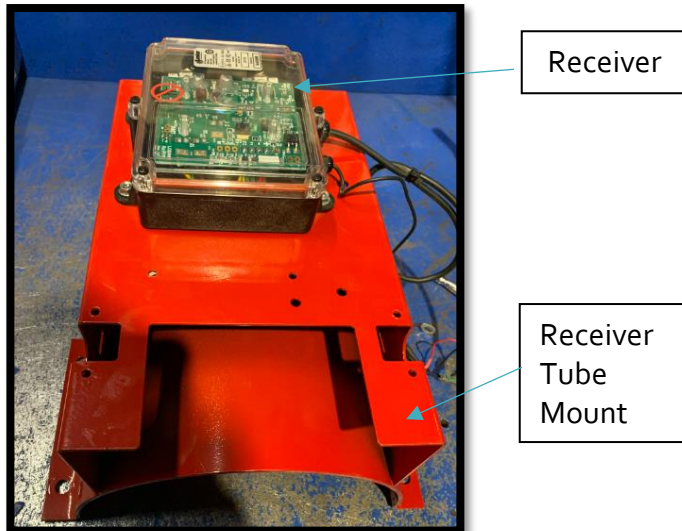


Figure 11: Receiver mounting onto Tube Mount Bracket

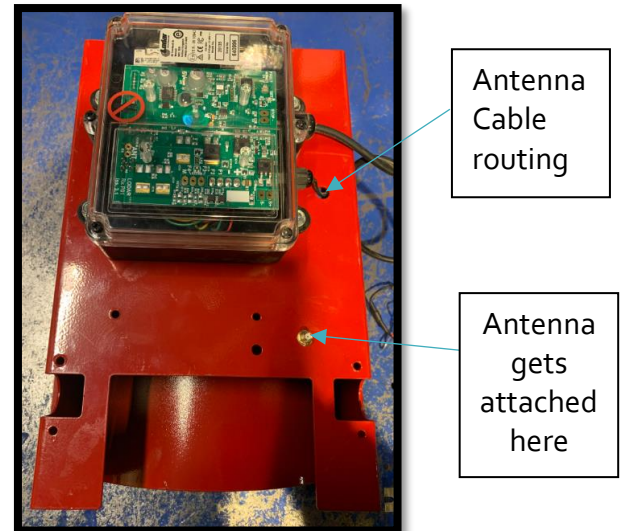


Figure 12: Antenna Wire Routing

- c. Torque #14 X 5/8" Sheet Metal Screw (19274) halfway on one side, leaving room for Part #20136 (CONTACTOR, 80 AMP) to fit underneath as shown in Figure 13. Then, slide contractor under screw, then torque screw all the way down to secure it as shown in Figure 14.

#14 X 5/8" Sheet Metal
Screw (19274)

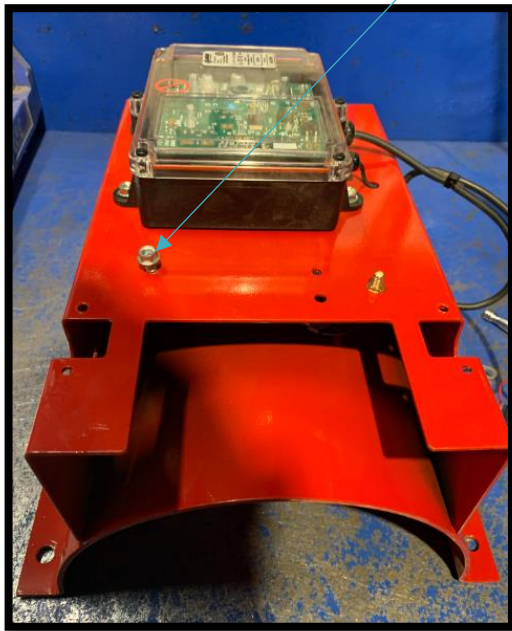


Figure 13

Contactor



Figure 14

- d. Take two of harnesses i.e. Part #20168 (WIRE HARNESS CONTACTOR TO MOTOR), then attach two of same colour terminal connections together with bolt and washer that comes with Contactor, then place on Contactor in the spot as shown in Figure 15.

Use ratchet with ½" socket to secure. Route harness to left and right through openings of receiver mount tube as shown in Figure 16.

Attach clamps part #20268 (Clamp, 5/8 X 12 INSULATED) to wires, then bolt down wires to top clamp on both sides using #14 X 5/8" Sheet Metal Screw (19274) as shown in Figure 17.

RED BLACK Harness (20168)

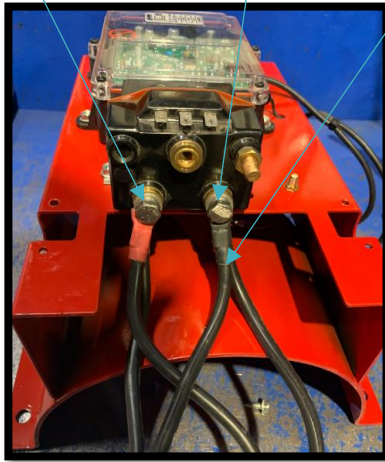


Figure 15



Figure 16

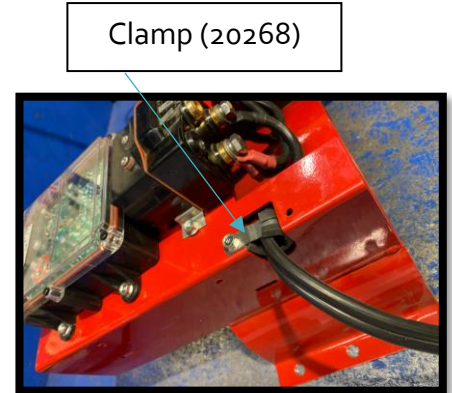


Figure 17

- e. Mount Part# 203528 (ELEC, DPDT, ROCKER SWITCH) using snap-in bracket onto Receiver Tube Mount as shown Figure 18 & Figure 19.



Figure 18

Rocker
Switch
(203528)



Figure 19

- f. Route PART #203536 (HARNESS, BOOT TO SWING) to inside receiver tube mount as shown in Figure 20, fasten on back of receiver mount with cable clamp (20268) as shown in Figure 21.

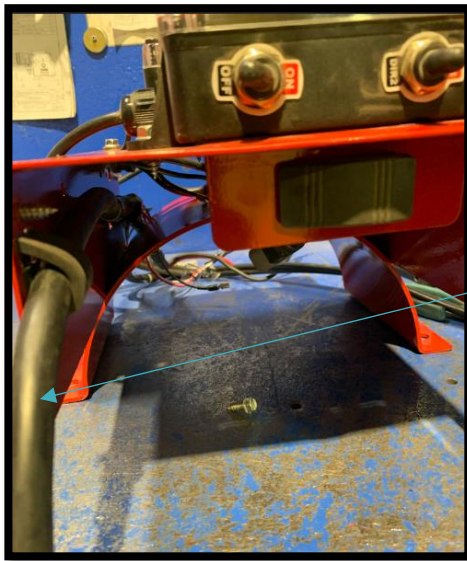


Figure 20

HARNESS
(203536)



Figure 21

- g. Attach wires of Receiver & Harness (203536) to contactor in correct order as shown in Figure 22:
- i. Attach small white wire (END #10) of Harness (203536) to terminal 'A' of Contactor.
 - ii. Attach small black wire (BK) of Receiver to terminal 'B' of Contactor.
 - iii. Attach small red wire (END #9) of Harness (203536) to terminal 'C' of Contactor.
 - iv. Attach small grey wire (END #8) of Harness (203536) to green wire (GN) of Receiver.
 - v. Attach small black wire (END #7) of Harness (203536) to yellow wire (YL) of Receiver.
 - vi. Attach small black wire with ring (BK0) of Receiver and black hose (END #6) from harness (203536) together onto input terminal 'G' of contactor, attach with a washer and nut at the end by using ratchet with ½" socket to secure it.
 - vii. Attach small red wire (RD) of Receiver and red hose (END #5) from Harness (203536) together onto input terminal 'E' of contactor, attach with a washer and bolt at the end by using ratchet with ½" socket to secure it.
 - viii. Connect Rocker switch (203528) to (END #4) of boot to swing harness (203536).

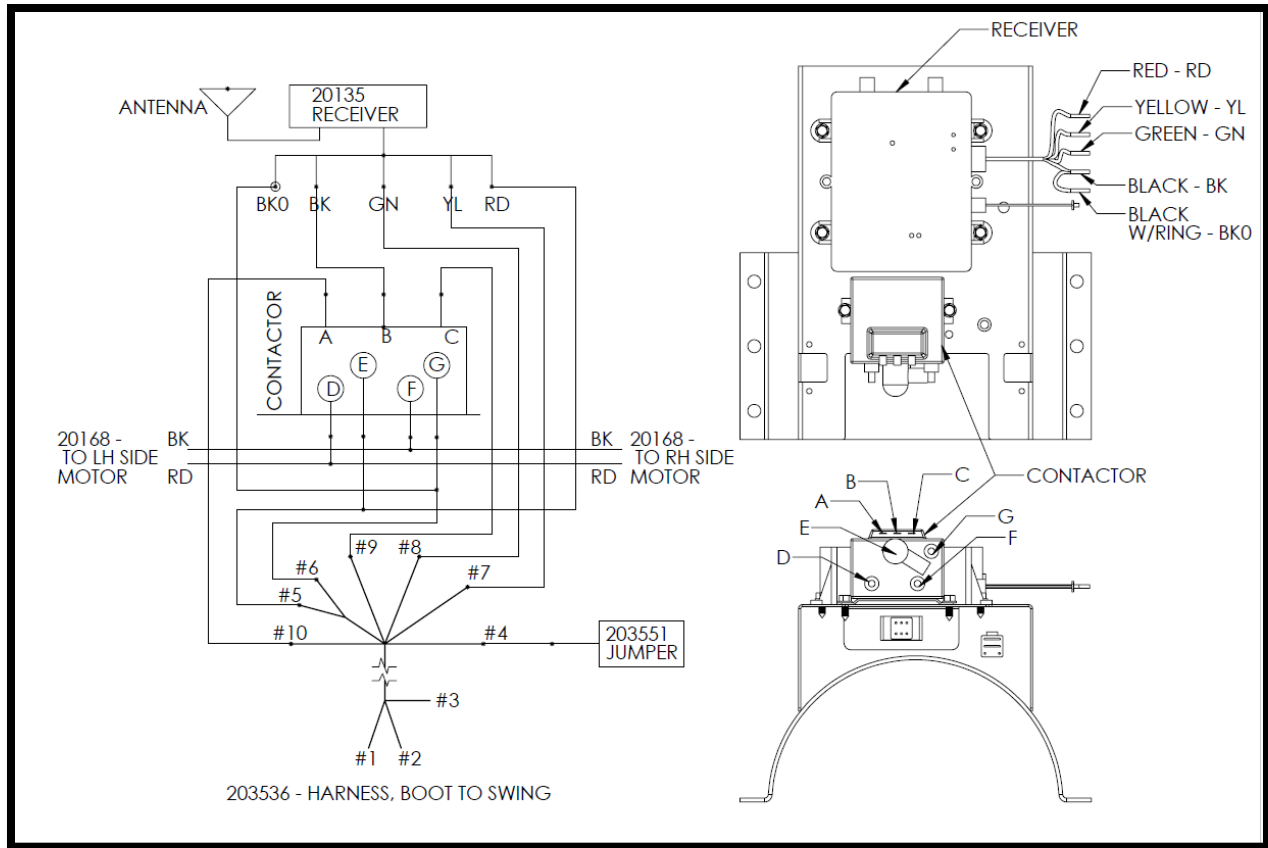


Figure 22:Wiring Schematic for E-winch Receiver Mount

- h. Mount Antenna as shown in Figure 23 and attach receiver cover (57453) and torque #14 X 5/8" Sheet Metal Screw (19274) screws to secure cover down as shown in Figure 24.

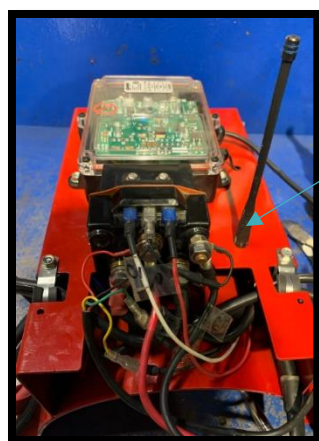


Figure 23

Antenna

Receiver Cover

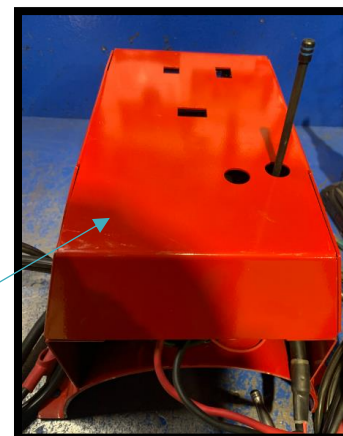


Figure 24

- i. On the high end of the Power Swing remote receiver box, flip the power switch to the ON position as shown in Figure 25.



Figure 25: Power Swing Receiver Box

STEP 7: Receiver Box Operation:

- a. Using the direction switch, move the switch in the desired direction of travel (either Dir1 or Dir2) as shown in Figure 25.
- b. Once finished moving the hopper, release the switch to stop operation.

STEP 8: Remote Transmitter Operation:

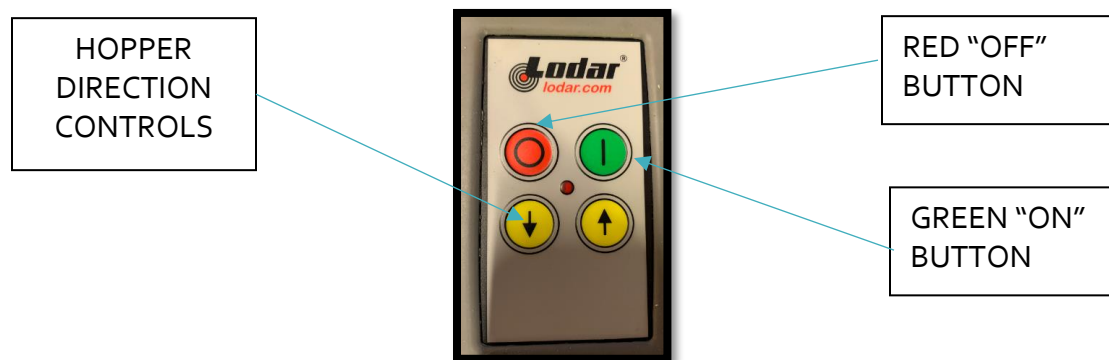


Figure 26: Remote Transmitter

- a. Push the green button to turn the remote ON (Figure 26)
- b. Push the yellow directional buttons (marked with arrows) located below the ON/OFF buttons in the direction you want the hopper to move (Figure 26).



- i. If this does not work:
 - ii. Push the red button to turn the remote OFF.
- c. Then push the green button to turn the remote back ON.
- d. Operate the remote as outlined above, using the two yellow directional buttons (marked with arrows) located at the bottom of the remote to move the hopper as desired.
- e. To lift/lower the winch with remote, Flip the switch actuator located on the high end of the Power Swing remote receiver box.