Revel Battery Cable Rework (Gen 1):

Tools required-

1. Screw gun with #2 Philips
2. Rachet with 3/8”, ½”, 9/16”, 5/8” and 17mm sockets
3. Torque wrench
4. Cutting tool
5. Wire brush

Parts required: Revel Cable Rework Kit – Gen 1 #RC7915-24-778

1. Convoluted tubing, 5/8" – 041953-02-000 – 12'
2. Cable clamps – 1 ½" 010497-02-000 (1), 1" 010497-03-000 (2) and ¾"-1 ¼" 083610-01-000 (2)
3. Screw, 8-18x1" PPH – 000G39-08-16T (7)
4. Screw, ¼-14x3/4" HWH – 000G42-04-12B (2)
5. Zip tie - 008343-03-000 (6)
6. Backing Panel – 033383-51-010 (1) Not Shown

Gen 1: Xantrex Dual battery system with Xantrex alternator – 11/5/2019 - 5/16/2022.

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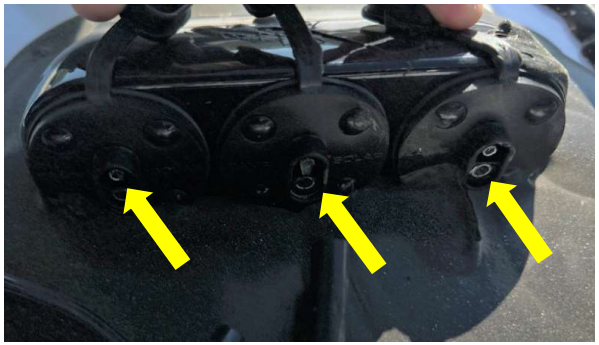
Step 1 – Pre-rework prep.

1. Disconnect the shore power cord from the coach – See Image 1.
2. Turn off the 12v lithium batteries by holding down the power button on the top of the batteries for 3 seconds. Make sure the blue LED lights are off - See Image 2.
3. Unplug the solar panels from the roof connection port. The port is located just underneath the leading edge of the rear solar panel. – See Image 3.

Image 1

Image 2

Image 3



Step 2 – Remove batteries.

1. Remove or loosen the nuts from the four ½” battery tie down bolts - see Image 1, yellow arrows.
2. Disconnect the batteries. This includes unplugging the 2-Pin Anderson connector, 4-pin battery communication connector, and the remote button connector.
3. A temperature sensor may be zip-tied to the right-hand battery positive cover and should be removed from the battery as well - see Image 2, Red arrow. This will be remounted in the same location.
4. Slide the batteries out of the compartment and set and aside.
5. Remove and discard the buss bar cover panel – see Image 3.

Image 1

Image 2

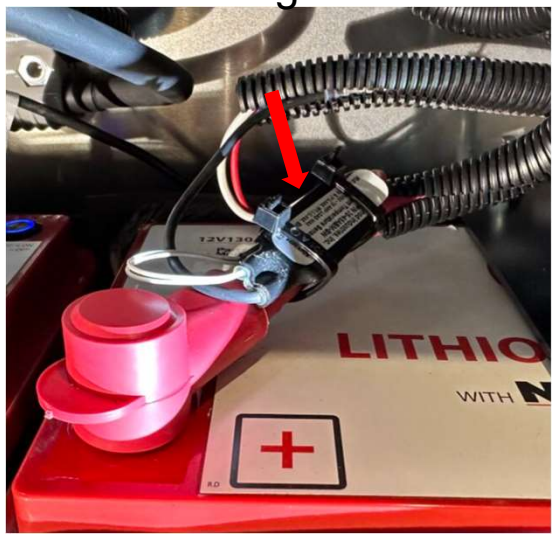


Image 3

Step 3 – Add convoluted tubing to red cables.

Ensure all red power cables in the battery compartment are covered with convoluted tubing.

1. Two battery feed cables, from large gray Anderson connectors to the positive buss bar – See Image 1.
2. Inverter disconnect cables – See Image 2.
3. Alternator 12v charging cable – See Image 3.
4. Lithium battery positive cables – See Image 4.

Image 1

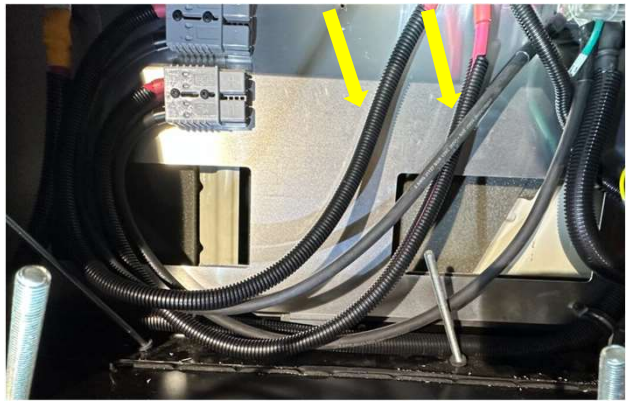


Image 2

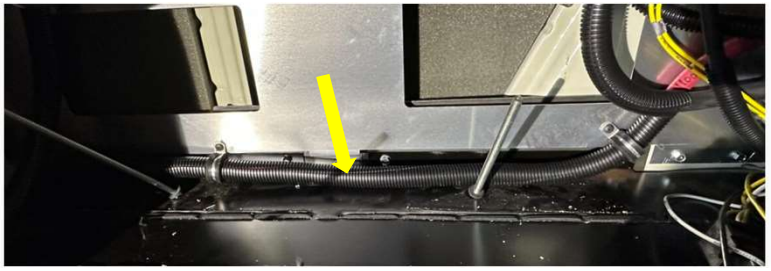
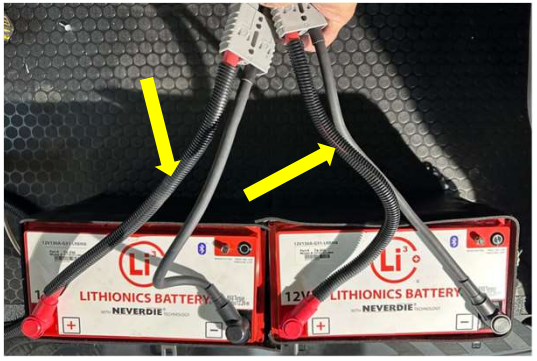


Image 3

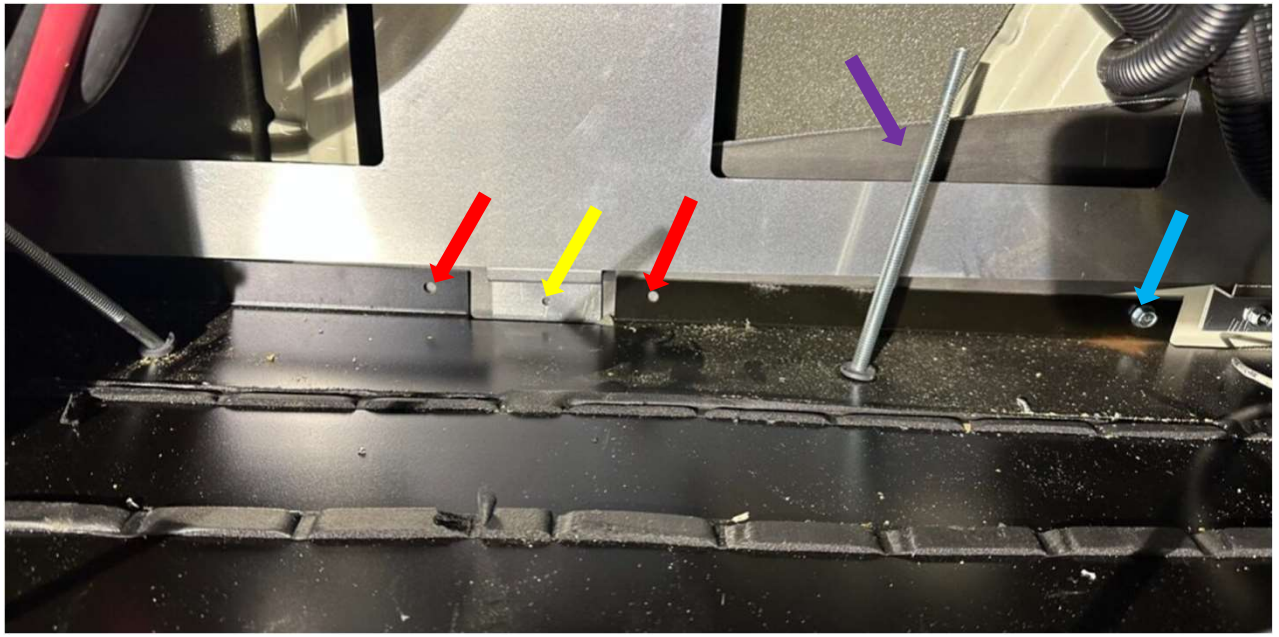
Image 4



Step 4 – Support the battery tray and back panel.

1. Some coaches may not have a backing panel installed in the area behind the battery – see Image 1. If missing, add backing panel 033383-51-010 – purple arrow - behind the existing aluminum back panel by sliding it through the cutout. The purple arrow shows the new panel not yet fully in-place, being slid in behind the existing aluminum back panel. Ensure all listed fasteners below make good contact with the new backing panel once installed.
2. If installing a new panel, it is necessary to remove and reinstall existing hex screw, see blue arrow.
3. Add (1) 1" Philips Pan Head screw to the aluminum back panel, see yellow arrow.
4. Add (2) ¾" Hex Washer Head screws to the holes in the battery tray bracket, see red arrows.

Image 1



Step 5 – Clamp/Immobilize cables.

1. Secure the red and black battery feed cables up to the tube at the top of the battery compartment using ¾"-1 ¼" clamp (2) and 1" PPH screw (2) - see Image 1, yellow arrows.
2. Secure the red inverter to inverter disconnect cable to the bottom edge of the back panel using 1" clamp (2) and 1" PPH screw (2) - see Image 2, red arrows.
3. Secure the red alternator output and black buss bar ground cables using 1 ½" clamp and 1" PPH screw. The cables will now route in front as opposed to on top of the inverter - see Image 3, blue arrow.

The cables and clamps need to be orientated as shown in the Image. This will keep them flush to the panel and away from all sharp edges.

To keep the cable routing clean and flush to the panel it may be necessary to disconnect cables at the buss bar or Balmar harness then reroute and reconnect them.

Image 1

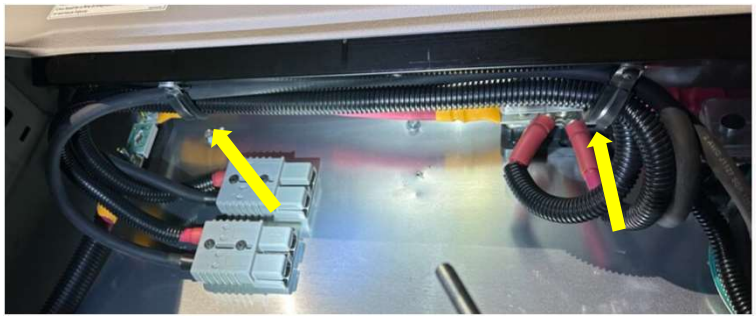


Image 2

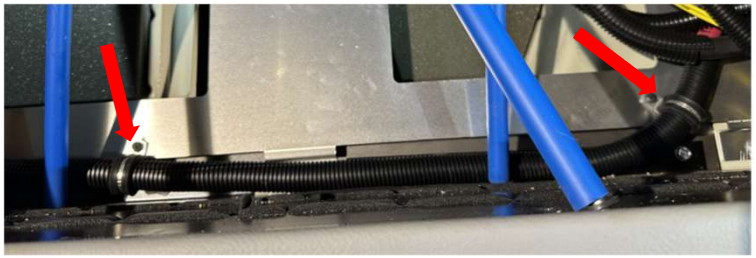


Image 3

Retorque all cable connections that were disconnected during this process. See the last page for the torque requirements.

Step 6 – Check connections.

1. Torque all buss bar studs to 190 In Lbs.
2. Torque the inverter 12v positive and negative connections to 88 In Lbs - see Image 1, red arrows. Note – this Image shows the inverter cover already removed.
3. Torque inverter disconnect studs to 120 In Lbs.

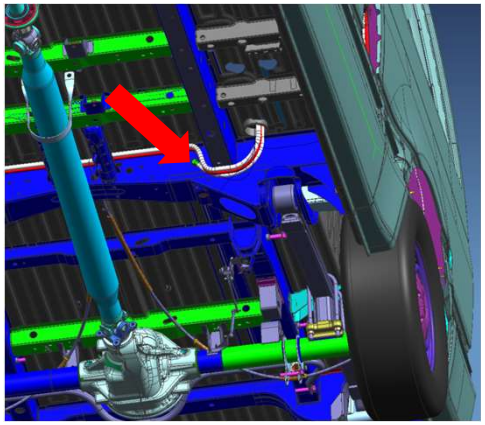
Image 1

Step 7 – Ground connection.

1. Under the coach, locate the ground cable that goes up through the floor in the battery compartment and connects to the ground buss bar.
2. Confirm that this cable is grounded to the chassis supplied ground. The chassis ground is located on the driver side of the frame crossmember that also supports the front suspension pivot – see Image 1 and 2. It is directly behind the fuel tank. If the cable is mounted with a self-tapping screw into the chassis frame, remove the circuit from the screw and reroute over to the chassis supplied ground.
3. Remove all connections from chassis ground and clean stud and mating surfaces with a wire brush. Clean surfaces are necessary for a good electrical connection.
4. Reinstall all original connections and the buss bar ground cable and torque bolt to 71 In Lbs.
5. While under the coach, inspect the alternator power and ground cables from the alternator back to the pass-through into the coach. Ensure the cable is properly secured and away from moving or hot parts, and that there is no visible chafing or exposed strands.

Image 1

Image 2



Step 8 – Reinstall the battery.

1. Install battery and tighten the battery hold down brackets until the tabs are deflecting downward - See Image 1.
2. Connect the grey Anderson main connector – see Image 2, yellow arrows.
3. Reconnect the 4-pin connector and the remote button connector to the battery – see Image 2, blue arrows.
4. Resecure the temperature sensor to the right-hand battery boot with zip-ties – see Image 2, red arrow.
5. Use zip-ties to secure the battery cable to the disconnect cable. Also secure any smaller gauge wiring to avoid chafing or excessive strain.
6. Turn on the 12v disconnect and Lithionics batteries.
7. The work is now complete.

Image 2

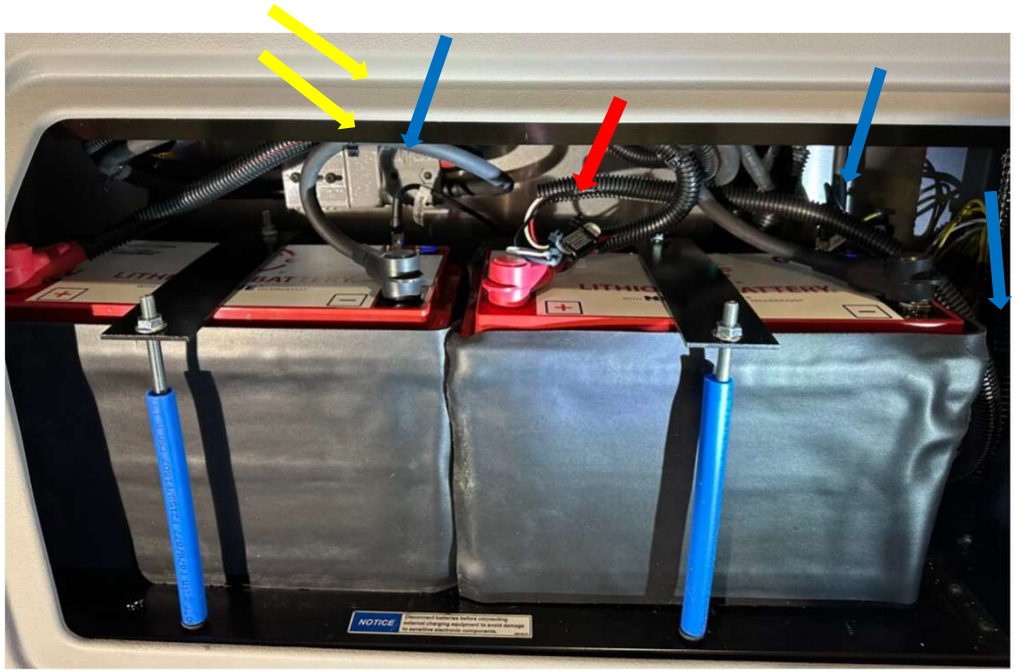
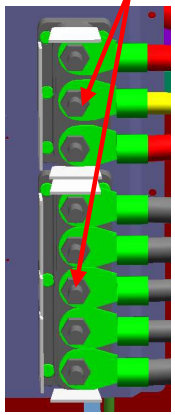


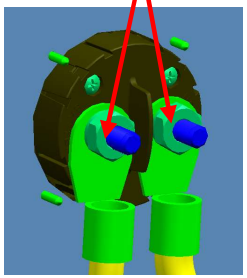
Image 1

Torque values-

3 or 5-way buss bar
325348-01-000 3-Way
355972-01-000 5-Way
17mm Deep well Socket
Torque – 190 In-Lbs. x All



Inverter Disconnect-
183904-01-000
9/16" Socket
Torque - 120 In-Lbs. x2



Xantrex Inverter-
328076-01-000
13mm Socket
Torque – 88 In-Lbs. x2

Read the entire instructions carefully before starting the procedure. If you have any questions, please contact Winnebago Industries' Technical Service Department by calling 1-866-653-4329 or by email: techservice@wgo.net. This document is confidential and is intended for dealer use only.