New Power Pack Configuration Batteries Replacement Procedure

Removing power pack cover

- 1. Please follow these instructions closely. Switching the polarity of the power pack will damage the Robomower electronics and cost you dearly. The tools needed for this procedure are two 5/16-inch wrenches or adjustable ones, or a Philips screwdriver and wrench/pliers.
- 2. Take the power pack out of the mower and position it on a well-lit area, preferably a workbench.
- 3. Remove the power pack fuse.
- 4. Stand behind the power pack, with its rear facing you and its terminals pointing away from you.
- 5. Remove the power pack cover by placing one hand firmly at the middle of the cover and lifting one front corner with the other. As shown below. Lifting the corners will pop the cover out from one side. Repeat this on the other side and the cover will come out.

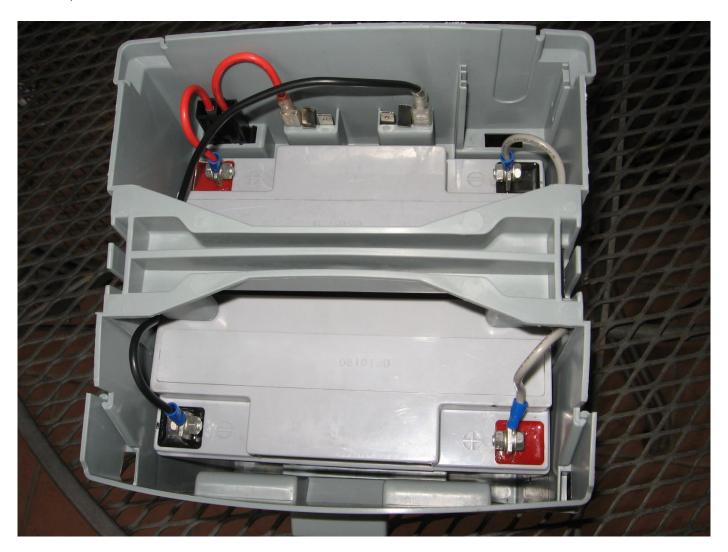




Roy Tamir

Picture: Removing the power pack cover by pulling up at its corners, one corner at a time

The new configuration has no tabs – the wires have a ring the end which is bolted directly to the battery terminal, as shown bellow.



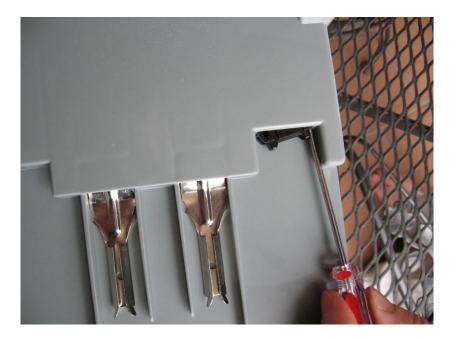
Picture: New configuration batteries connection to power pack wires

<u>Procedure</u>

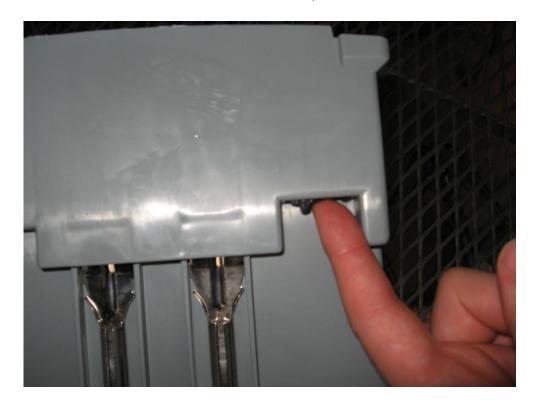
Remove the fuse holder using a flat screwdriver – push the locks to the inside from both sides and the fuse holder will slide in easily.



Picture: Unlocking and removing the fuse holder



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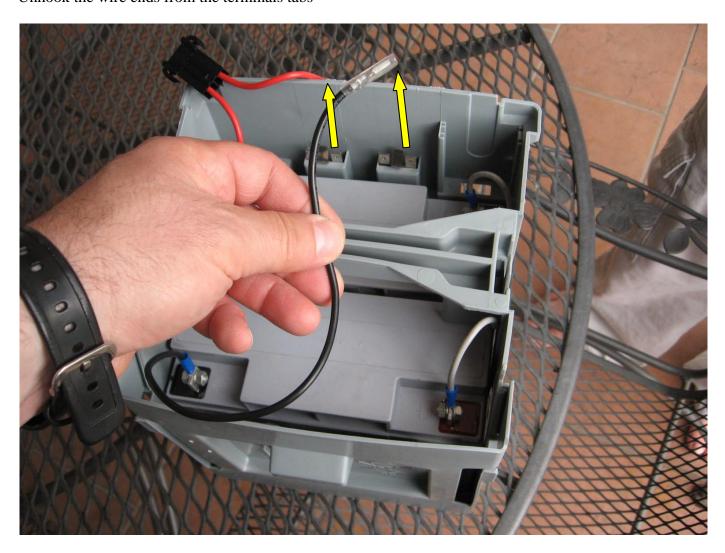


Picture: Pushing the fuse holder into the power pack cavity after unlocked



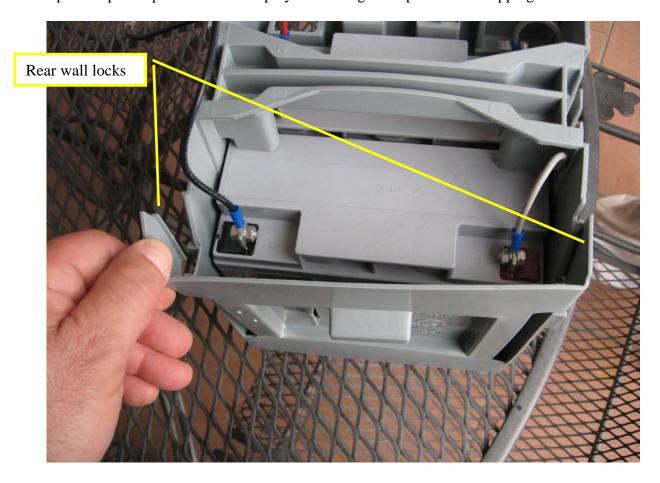
Picture: Fuse holder released out of power pack case cavity

Unhook the wire ends from the terminals tabs



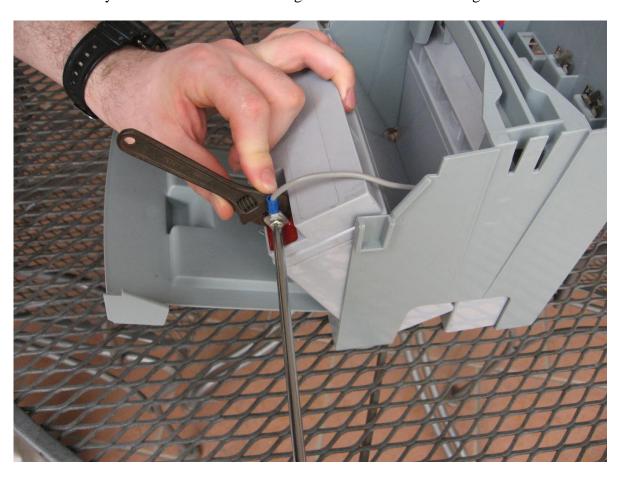
Picture: Unhooking wire ends from power pack terminals tabs

Open the power pack rear wall flap by unhooking the top locks and flipping the rear wall backwards



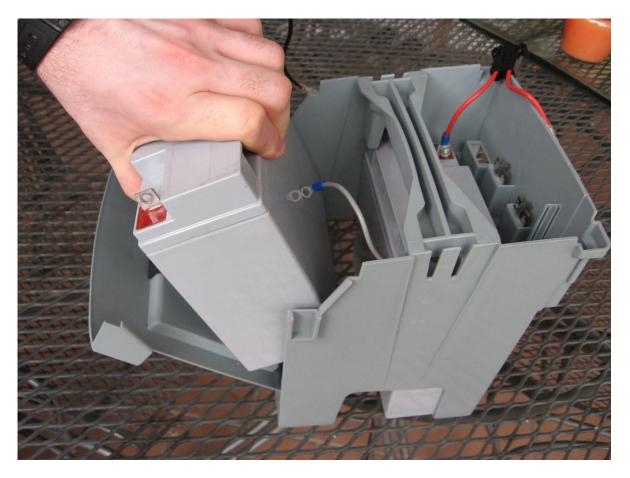
Picture: Unhooking rear wall locks

Tilt rear battery backwards to allow reaching the bolt and remove the right side bolt



Picture: Removing battery connection bolt

Once the Grey wire bolt is removed, pick up the rear battery and take it out – the black wire still attached to it in at this stage. Remove it when the battery is out.



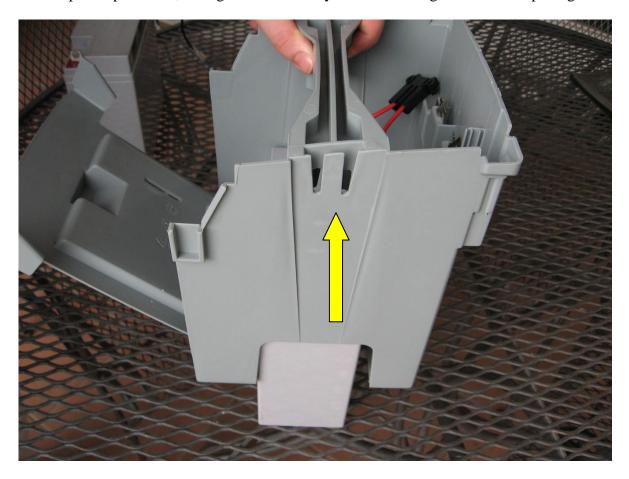
Picture: Removing rear battery out of power pack case – black wire still attached

Push the front battery backwards, till it stands in the midlle opening at the bottom of the power pack case.



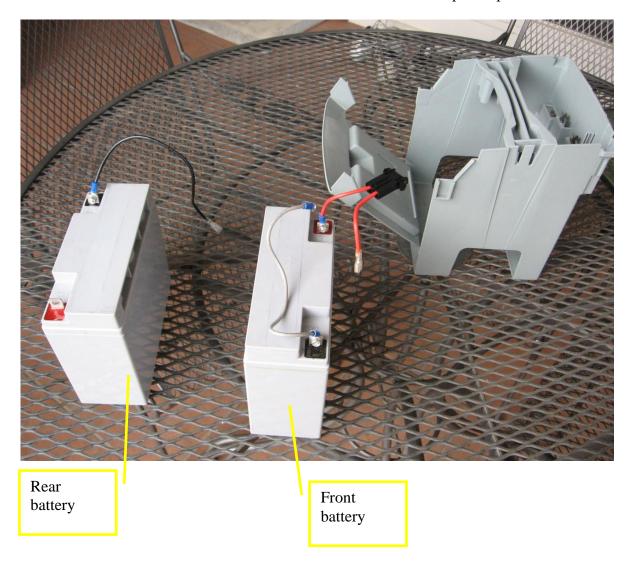
Picture: Sliding the front battery backwards to the middle of the power pack case

Lift the power pack case, letting the front battery slide out through the bottom opening



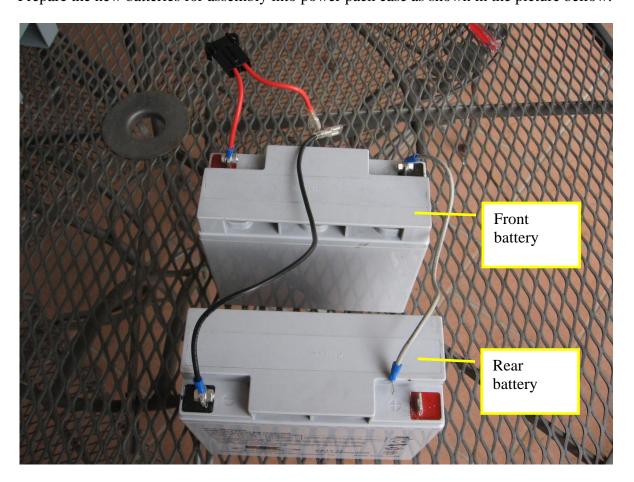
 $Picture: Lifting \ the \ power \ pack \ case-allowing \ the \ front \ battery \ to \ slide \ out \ and \ stay \ on \ the \ work \ surface$

This is how it looks when both batteries have been removed out of power pack case



Open bolts and nuts to remove wires and reconnect them the same way to the new batteries. Make sure the batteries arrangement and polarity is exactly as shown in the picture above.

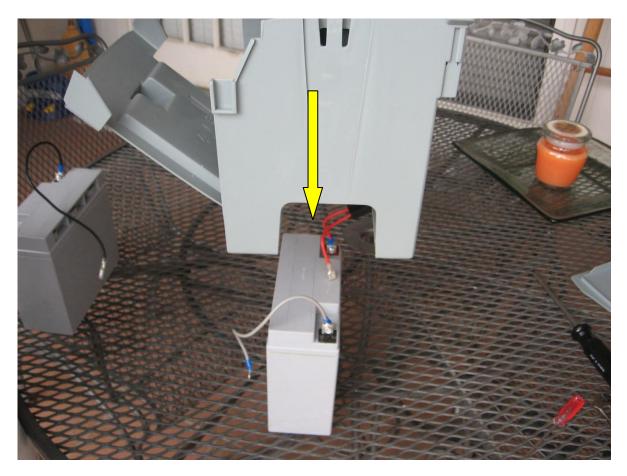
Prepare the new batteries for assembly into power pack case as shown in the picture bellow.



Picture: New batteries connected to wires and ready for assembly into power pack case

Assembly of new batteries into power pack case

Lift the power pack case and position it on top of the front battery, so the battery slides into it



Picture: Power pack case placed on top of front battery

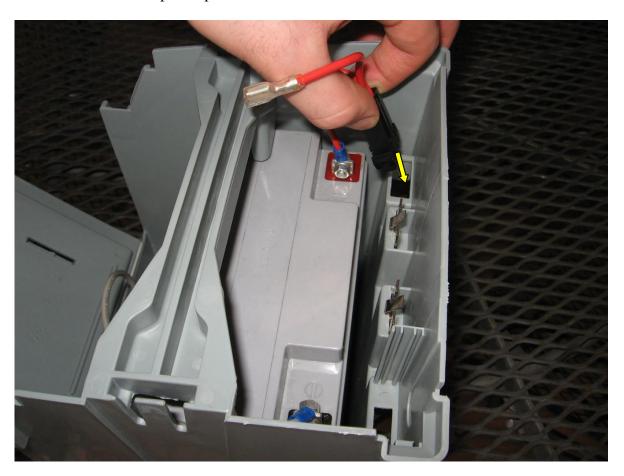
Insert Grey wire through small right side gap below the power pack case handle



Picture: Power pack case placed on top of front battery and then Grey wire pulled backwards through small opening under the power pack case handle – shown bellow as well

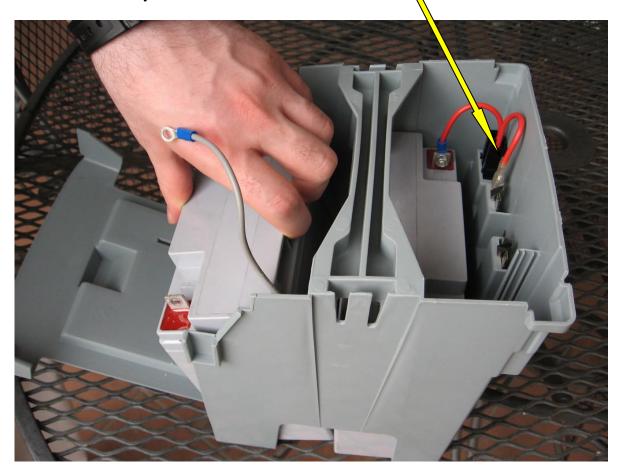


Insert and lock the fuse holder at its place in the power pack case, then push the front battery forward till it touches the front power pack case wall.



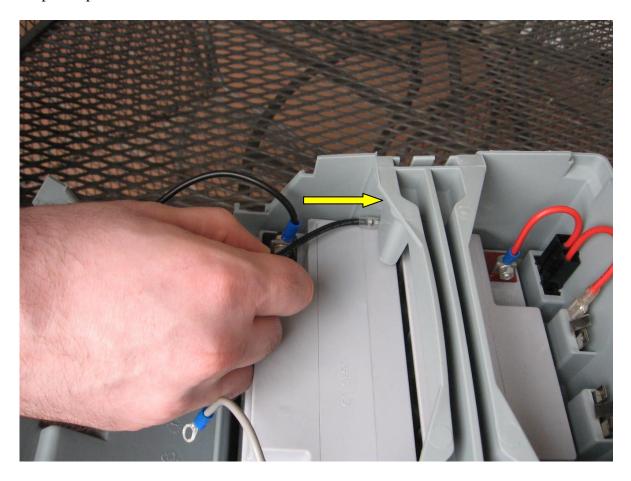
Picture: Fuse holder assembly to power pack opening

Connect the fuse holder red wire to the terminal tab near it Insert the rear battery as shown bellow



Picture: Fuse holder red wire connection to terminal and insertion of rear battery

Slide the black wire through the opening in the bottom side of the case handle, towards the front of the power pack case



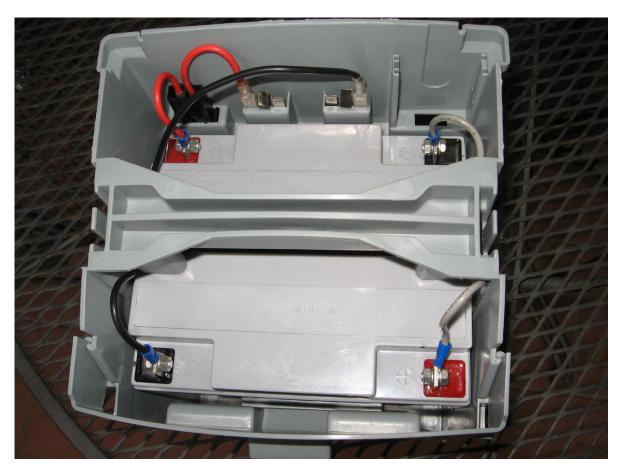
Picture: Black wire insertion towards the front, through opening at the bottom of the handle

Tilt backwards rear battery to allow access and connect Grey wire to rear battery Red terminal as shown bellow



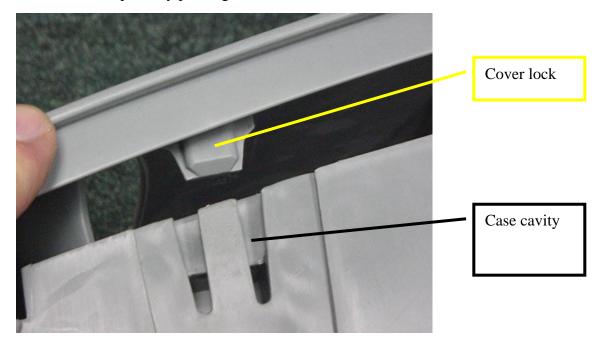
Picture: Grey wire connection to rear battery red (Positive) terminal

Connect black wire to right hand side power pack terminal as shown bellow. Make sure both Grey and Black wires are led through the opening and the bottom part of the case handle and all bolts and nuts are tight. Flip close the power pack rear wall as shown bellow.

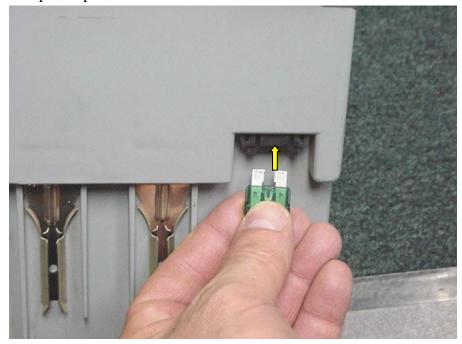


Picture: All ready for putting the power pack cover back on.

Position the cover on top of the battery case and aim the cover hooks at one side opening as shown below. Click it into its place by pushing the cover down.



Click the other side of the cover into its cavity at the case. You may have to twist the cover a bit, similar to the way you had to twist it up for removing it, in order to align the lock into its cavity. Insert the power pack fuse into the black fuse socket.



Picture: Power pack fuse.

Test the power pack terminals voltage. Should be 24 - 26 VDC. Most important, test with the voltmeter red probe on the terminal close to the fuse and the black probe on the other one. Use a digital voltmeter and if the display is negative, such as -25 (Minus 25) VDC, the polarity is wrong and the wiring was done incorrectly – **must be fixed**.

