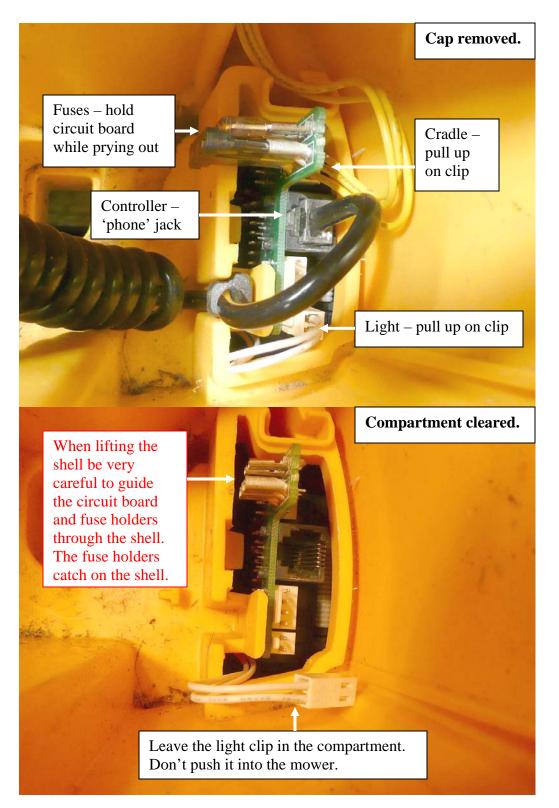
To remove the shell on my RL500 Robomower --- first remove the battery, then remove the controller, cradle, fuses and wire clips under the cap in the controller compartment.

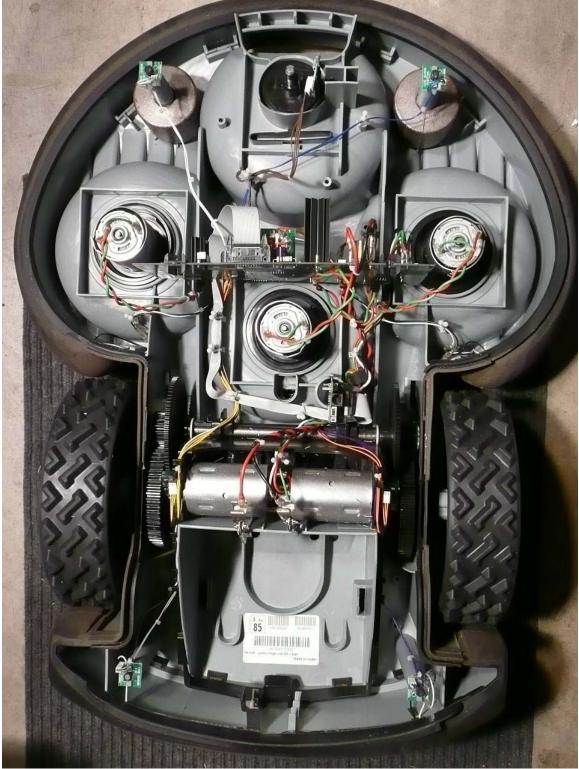


Now that you've removed everything from the controller compartment (placed safely off to the side) you can flip the mower over (on a towel or mat) and remove the 10 (mine were identical) compression tabs with one (or two) flat head screwdriver(s). They just pry out.

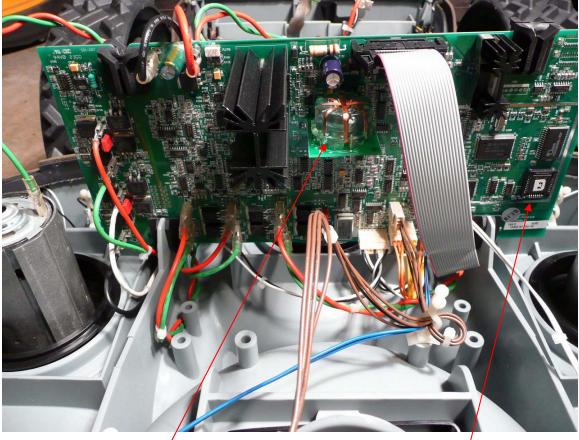


Now flip the mower back over and pull/pry up on the shell starting at the battery compartment working your hands under the shell all the way around. Watch the circuit board in the controller compartment as the fuse bases can catch on the shell. The shell will lift right off --- however make sure nothing is (still) connected by peeking under the shell when it is an inch or two off the base then set it safely aside.

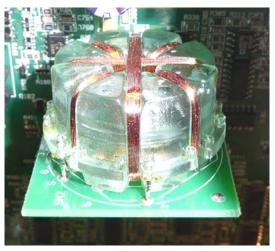
Wow – there's not much in here... a motherboard, 5 identical motors, a geared reduction drive train with rear height adjustment, a few sensors (perimeters, odometers, bumper and front wheel) and some cast iron weights in the front...



The Motherboard... It looks like it would be pretty easy to remove/replace. I took more detailed photos of all the connections.



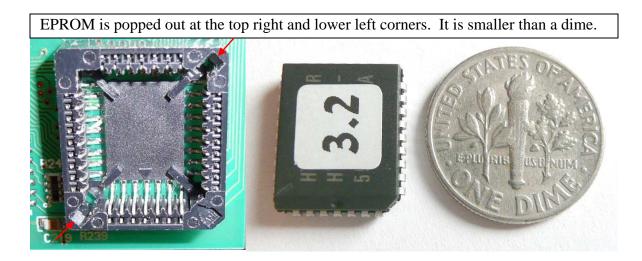
Compass



EPROM (Erasable Programmable ROM)



The EPROM only goes in one way. The bottom right 'corner' is cut at 45°. So you can't put it in incorrectly. Make sure you're grounded before touching any electronics.



The motors (sleeve removed)... <u>http://www.johnsonmotor.com/</u>

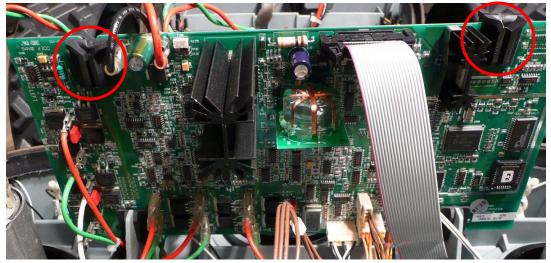


Front Wheel Click Spring...



Reassembly – is the reverse of the disassembly. Check these 2 items before you replace the shell (you may have other items as well – these were issues I encountered).

1. Make sure these rubber holders are in place on the motherboard – they also snap into the shell when you push it down. One stuck to the shell when I lifted it off.



2. Make sure the battery connecters are sitting correctly on the base before you put the shell on --- they slip off when the cover is removed... You will have to pry/pull the shell out a little bit to get it back over these.



Replacing the shell --- Lower the shell on slowly and vertically --- start by guiding it into the battery compartment then guide the circuit board into the controller compartment. Press the shell into place working your way around it. Once snapped into place gently roll/flip the mower over and (lightly) tap the compression plugs in with a hammer and flathead screwdriver to secure them. They should sit slightly below the surface.