Changing out a Main Board on the Skycut C16

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What you'll need:

Phillips Head Screwdriver

Nose pliers (optional)

Awl, paper piercer, pointy craft knife or possibly tweezers

Masking Tape

Pen or marker

Good lighting

Methodical approach: be well rested and plan to take your time

To Access the Main Board:

- (1) Lower the pinch wheel lever in the back so that the wheels are in the up position.
- (2) Slide the wheels so that they are roughly spaced evenly across the cutter. Make sure the black tabs on the wheels are up as they will serve as the "resting feet" when the cutter is positioned upside down.



(3) Position the cutter upside down so that you can access to bottom panel:



(4) Use the screwdriver to remove all 6 screws. The back panel will now lift off. Move those items away.

Connector Map:



Removing the Old Board:

- (1) There are 8 connections that will need to be removed and later plugged into the new board. While it doesn't matter the order you remove them, you don't want to mix things up.
- (2) Before removing any, tear off 8 pieces of masking tape and number them 1 8. As you remove each one, attach the appropriate number to the connector so that it matches up with the photo that's been labeled.
- (3) Note that some of the connectors may have been reinforced with hot glue. You want to separate/break these hot glue "over-runs" so that the connector can be easily removed. I used a paper piercer/awl to gently pop off the parts that would be a problem. This doesn't mean you need to remove all of the hot glue you see. Compare your old board with your new board to see where trouble spots might be. Here's an example and note that the top part isn't an issue... leave the hot glue in place. But the hot glue also ran down the side and onto the board. I needed to break off the glue at the bottom so that I could disconnect that connector:



(4) When removing connectors, you don't want to pull on any wires or cables directly. Instead, you want to gently loosen the connectors, from their seats, by wiggling back and forth. I used my fingers but you can also use nose pliers. As I removed each one, I placed the label on the connector before doing the next. Note that it can also be beneficial to tape that connector off to a side so that you can more easily access the screws later on:



(5) Below are tips on how I removed each of the 8 connectors. However, mine might be a bit different from the older main boards, so if something isn't working the same way, just stop and take a photo and send me details, if you can't figure it out easily on your own.

Connector 1: The little black piece moves up and down. When in the down position the cable is locked in place. When you gently lift up the black piece (a little bit), on both sides (see arrows), the cable will then slide out:



Connectors 2 and 3: These came out by just grasping the outer upper sides of the plastic and wiggling left and right until unplugged from the lower plastic seat:





Connector 4: This module is connected by a row of small pins along the top and along the bottom. Grasp the outer left and right sides of the module and wiggle back and forth and pull upwards. Be careful not to tug on the little black wire that should remain connected to the module on the right:



Connector 5: This one is similar to Connector 1 in that it's a cable that will slide out. First, I pulled up the long piece of tape that was pressed down to the board. Then I had to rotate the black piece to the left, just a little rotation to the left, and then the cable slid out.



Connector 6: This one has a little clip that needs to be pressed inward before the plug will release. This is where the nose pliers worked well so that I could squeeze the clip gently and then pull upwards to release it. But you should be able to just use your fingers to squeeze the little clip inward and pull up:



Connectors 7 and 8: Similar to Connectors 2 and 3 in that you just wiggle the two sides until they release. Just be sure to carefully label each one as these two are the easiest to mix up.



(6) Remove the 6 screws (3 on the top and 3 on the bottom) which connect the old board to the cutter. Set those screws aside, separate from the ones you removed from the bottom panel. You should now be able to completely remove the old board.

Installing the New Board:

- (1) Basically, it's just a reverse of the prior section. Align the new board with the holes and reinsert and tighten the screws.
- (2) The connectors can be reinstalled in any order. Again, wiggle back and forth to get the connectors reseated. <u>Important</u>: Use the earlier photos to make sure wire colors match up left-to-right as you're installing a connector. For example, on 7 and 8, the blue wire should be on the right side and the black wire on the left side.
- (3) On Connector 4, remember that the label on the module is upside down. Carefully line up the little pins with the holes, making sure the left-most pins are going into the first holes on the left. Press down on all four corners to make sure it's fully seated.
- (4) On Connector 5, the one on your new main board is different from mine. It appears to be more like Connector 1 in that the seat moves a little bit up/down. So first see if it pulls up a bit. Then slide the end of the cable into the slot and gently push down on either side.
- (5) Check all connectors one last time to make sure they seem properly seated. Then replace the back panel. Remember that the holes in the panel should be aligned over the black fan that's on the main board. Refer back to the second photo, if needed.