EKG Module Assembly and Leak Test

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Preparation

1. Tools Required
   1. Xacto knife
   2. #1 Phillips Screw Driver
   3. Light pipe install tool
   4. Super glue gel
2. Document Required - !0050 (Current Rev) Assy, ineedMD Mechanical wBOM

Assembly Process

1. From the kit, Remove the Bottom, the PCBA, and the gasket.
2. Install Light pipes
   1. Remove the bottom part and three light pipes from the kit.
   2. Note the light pipe has a large ring around it, on one side of the ring is a short length/protrusion, on the other side is a long length/protrusion
   3. Place the long length of the light pipe into the light pipe install tool.
   4. Under magnification, carefully apply glue to the to the edge of ring surface on the short length, NO GLUE CAN BE ON THE ENDS OF THE LIGHT PIPES
   5. To install the light pipe into the bottom, turn the bottom upside down so the light pipe will be pushed upward into the light pipe holes. The tool with the light pipe must be pointed straight up, centered in the light pipe hole and guided into place. Hold the tool with the lightpipe in place for 10 seconds to allow the glue to set
   6. Repeat the above step for the other two light pipes.
3. Attaching the Gasket
   1. Remove the liner from the gasket by inserting the Xacto knife blade between the liner and the gasket at the outer edge of the 10-pin area of the gasket.
   2. Gently remove the liner from the two connector areas of the gasket. BE CAREFUL NOT TO STRETCH THE GASKET.
   3. Carefully insert the PCBA connectors into connector areas of the gasket; push the gasket over the connectors, keep gasket parallel to the board edges, until the inboard edge of the gasket is 1/16” from the board edge
   4. To install the PCBA with gasket into gasket groove in the bottom, gently insert the connectors into the side wall grooves on the bottom part. Be sure that the gasket stays in the grooves while pushing it into place in the bottom. The PCBA will have to be tilted slightly until the next step is completed.
   5. Gently peel away the liner from the remaining areas of the gasket using care to be sure it’s not stretched. Once the liner is completely removed, carefully align the gasket over the perimeter groove, be sure the adhesive side is oriented down towards the bottom of the groove. Starting at the corners, gently push the gasket into place, working evenly alternating from one side to the back, pushing the gasket into place.
   6. Perimeter Gasket Inspection. Once the gasket is in place inspect the entire length of it to be sure it’s not twisted.
   7. Connector Area Gasket Inspection. AT the outboard ends of the 10-pin and USB connectors, there will be a 90° twist where the gasket is bent downward into the side groves of the connector area, but there should be no other twists. The gasket aroung the connectors should be in the grooves – there is a tendency for the gasket to slip out when the PCBA is put into place on top of the standoffs.
4. Attaching the Adhesive to the Interior Surface of the Top. (The adhesive holds the battery in place
   1. The pad is to be centered on the interior surface, ref assembly drawing.
   2. Remove the liner from one side of the pad, starting at one end, lay the pad into position being careful to keep it centered in the interior surface, and lays completely flat with no kinks
5. Lay Battery into Place
6. Lay Foam Cushion On Top of Battery
7. Install Top onto Bottom
8. Secure Top to Bottom with Two Screws
9. Install Back Label
10. Install Front Label
11. Test
12. Pack.