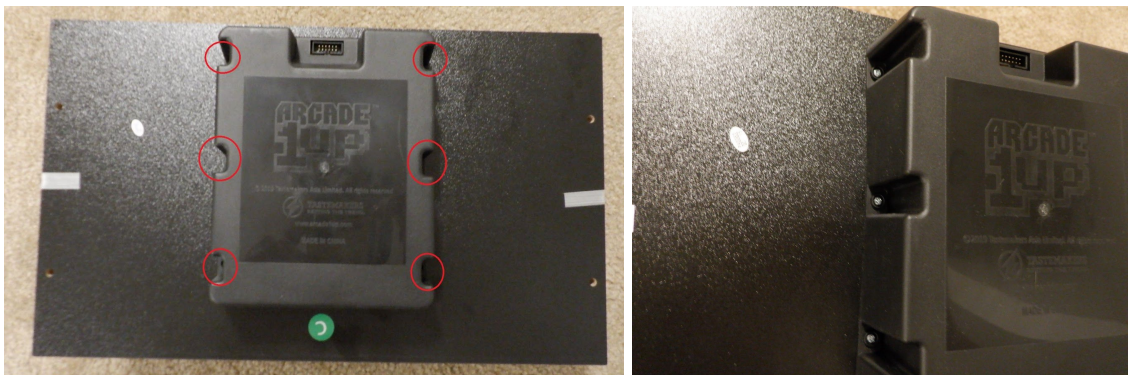


Instructions for Converting Star Wars Arcade-1Up Flight Yoke to an Alan-1 Yoke

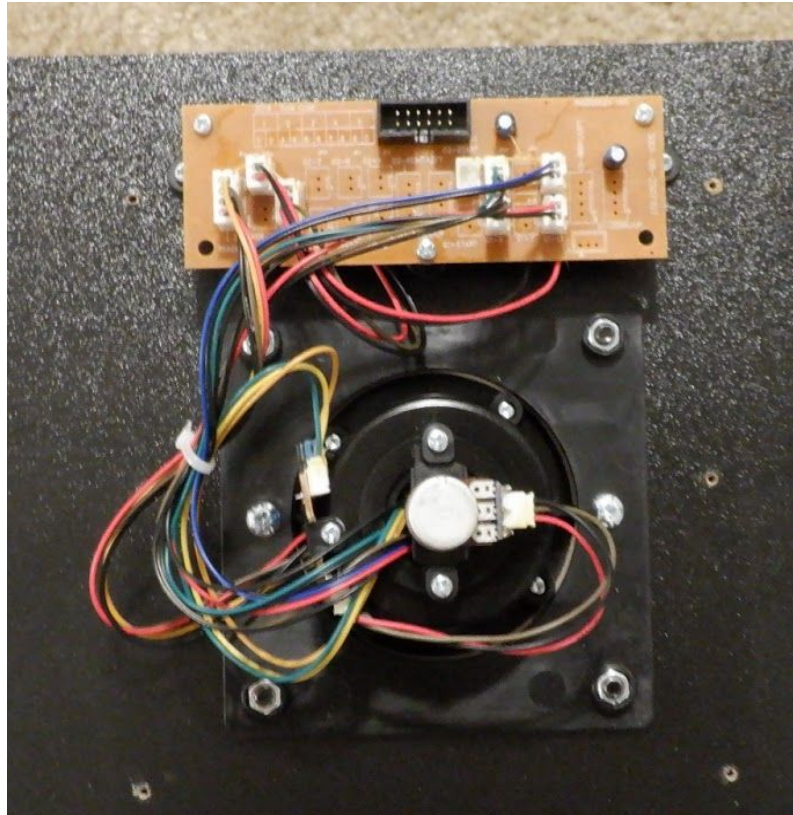
1. Remove the control panel from the Star Wars Arcade-1Up cabinet.



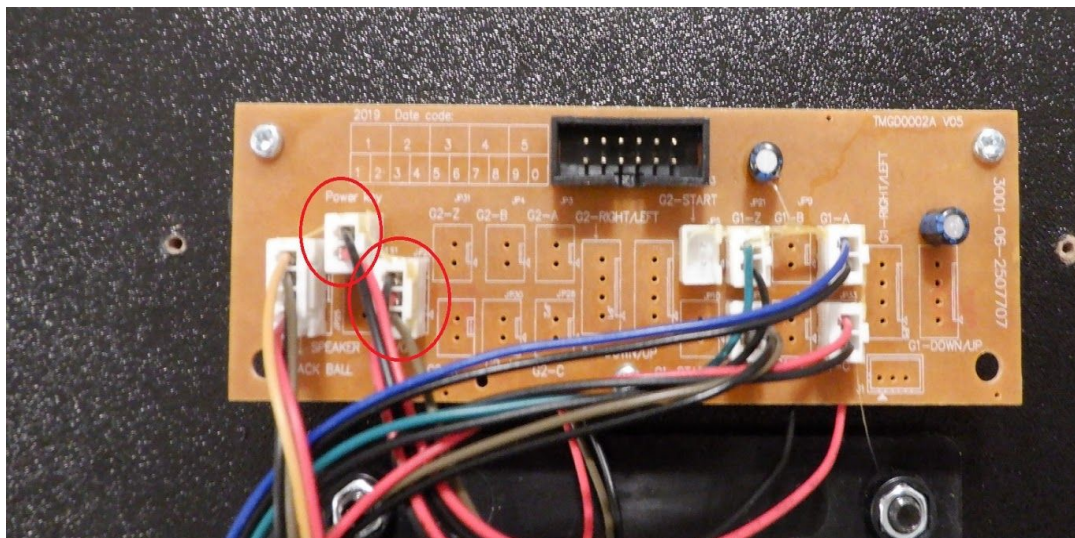
2. Remove the 6 screws from the bottom plastic cover.



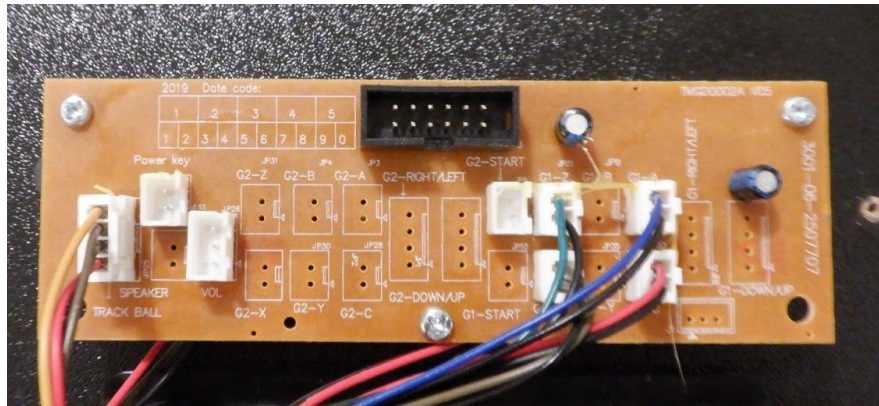
The controller electronics will now be exposed.



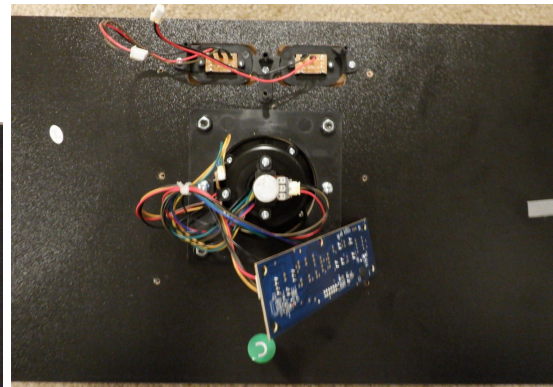
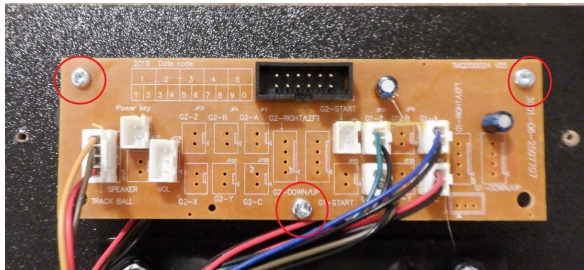
3.Remove the glue on the connectors coming from the volume and on/off switches. The glue is very stiff. Heating the glue with a hair dryer can make it soft and easier to remove. **Use caution when removing the glue! The connector can be easily damaged if forced!**



Unplug the connectors after the glue is removed.



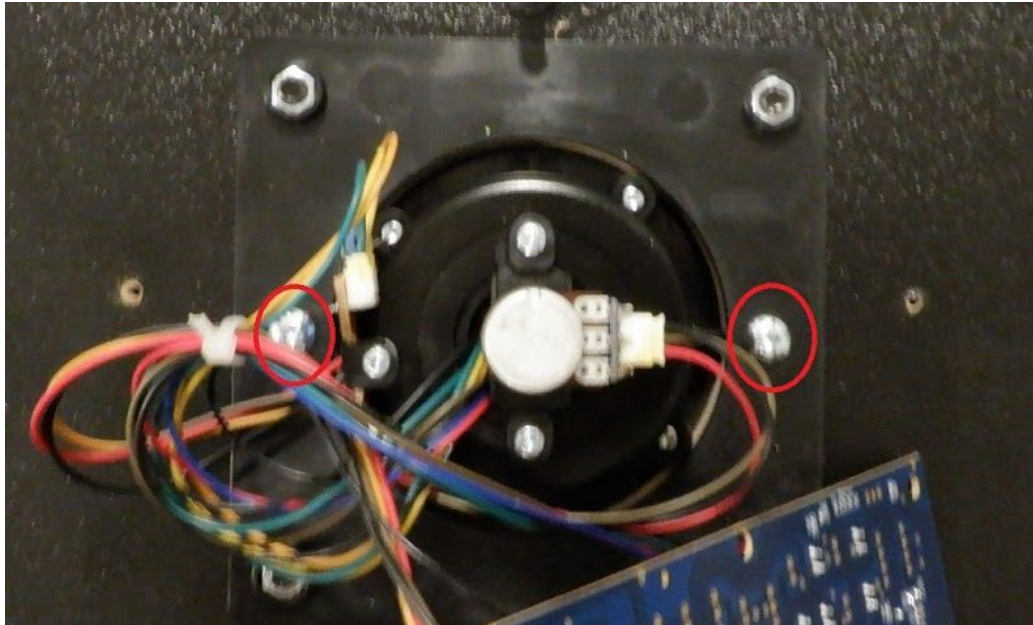
4. Remove the 3 screws from the printed circuit board. The PCB will now be unattached to the frame.



5. Remove 4 screws from the top of the control panel that holds the yoke to the panel. The 4 screws are hidden by the yoke. The yoke must be turned at an angle to gain access to the screws.



There are 2 more screws on the bottom that must be removed.



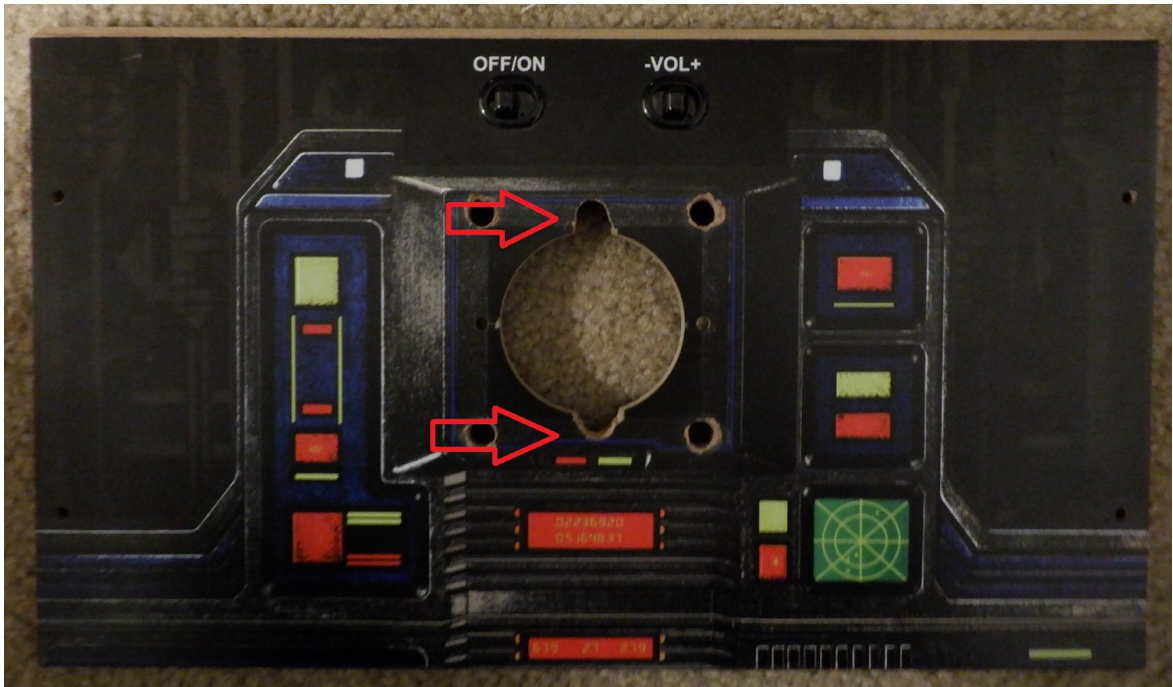
The yoke should then be free of the panel.



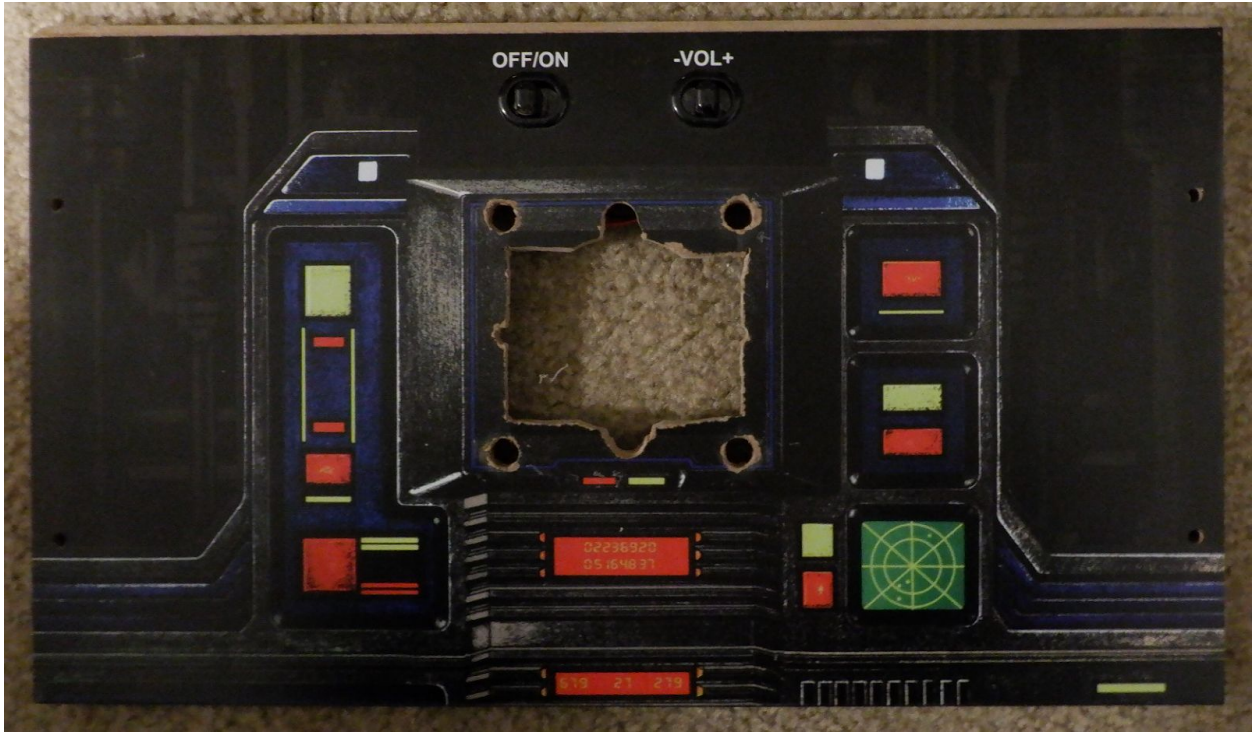
6. Drill out the 4 mounting holes with a 7/16 drill bit.



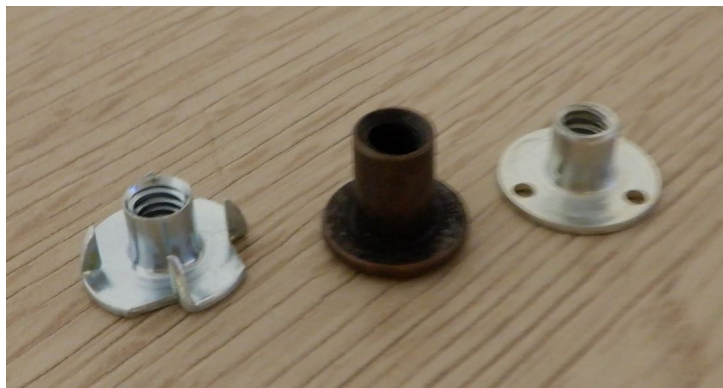
7. Drill a hole at the top and on the bottom of the large opening using a 1/2 drill bit. These holes will allow the pair of nuts on the bottom of the yoke to mount below the surface of the control panel.



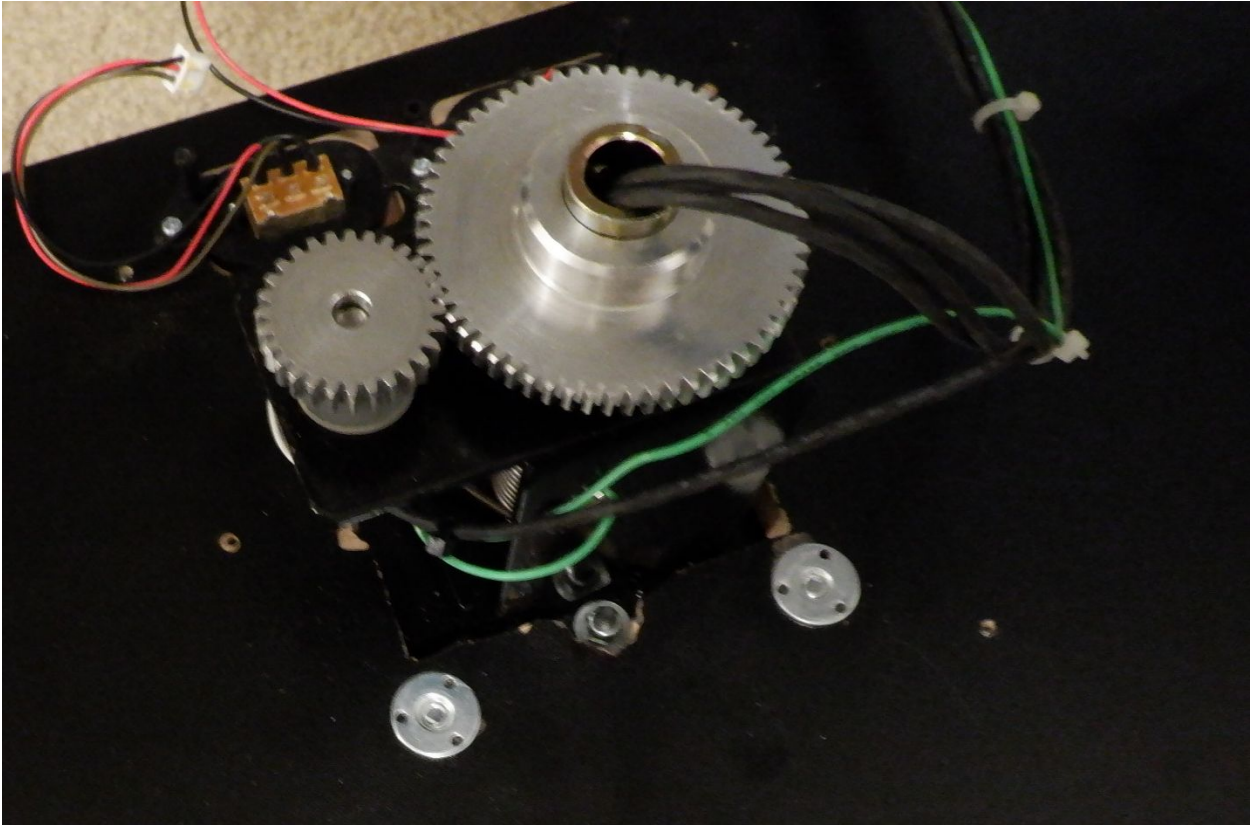
8. Use a coping saw or other similar saw to cut the circular hole into a rectangular hole. Notice there is a black square around the large hole where there are no graphics. The left and right side should be cut on the edges of this square outline. The top and bottom should be cut leaving about 1/2" of material between the large hole and the 4 main mounting holes as shown below. The cut does not need to be perfect as it will be covered by the controller and not visible after final assembly.



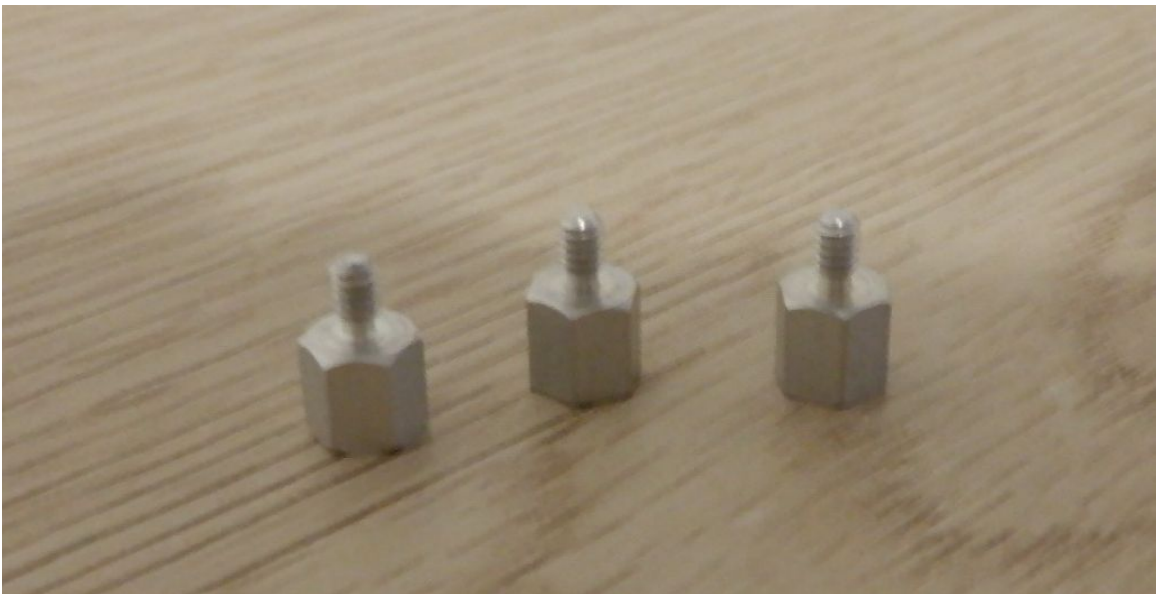
2 types of hardware can be used to attach the yoke to the control panel: 1/4-20 connecting cap nuts or 1/4-20 t-nuts. Both parts are readily available at Home Depot or Lowe's. The connecting cap nuts have a longer shaft and need to have 1 or 2 3/8 washers placed under it to have it tightly fasten the yoke to the control panel. If the t-nuts have spurs on them, they should be pounded flat with the base of the t-nut. In the image below, the connecting cap nut is in the middle, a t-nut with spurs is on the left and a flat base t-nut is on the right.



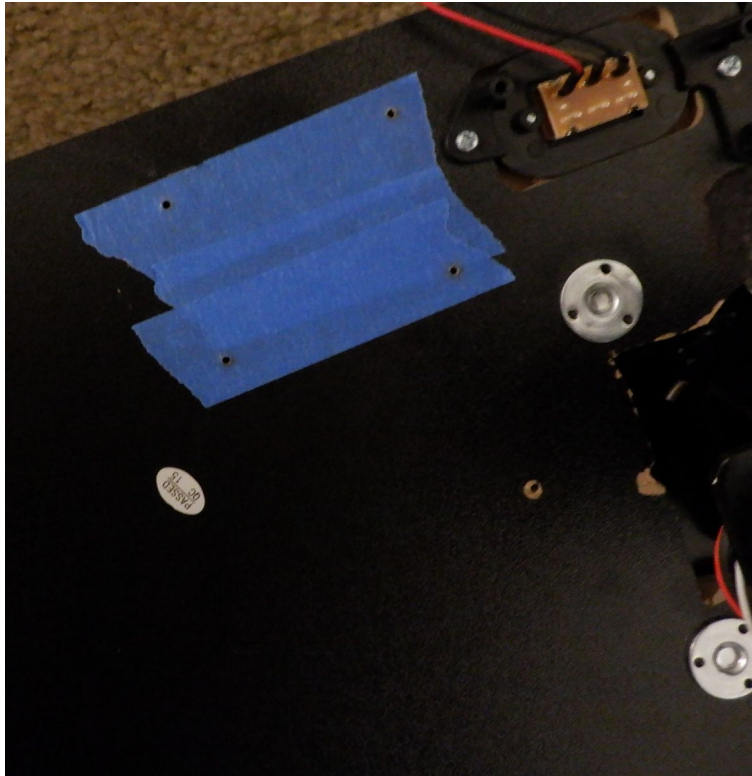
9. Secure the yoke to the control panel with the selected hardware.



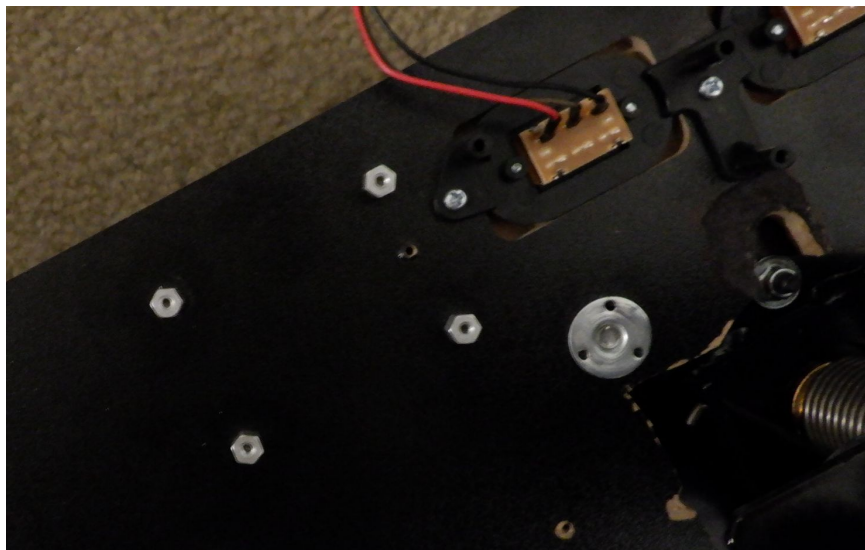
The yoke adapter board was designed to be mounted with 4-40 standoff hardware. The mounting holes are large enough to accommodate other mounting hardware sizes. It is recommended to mount the PCB using 4-40 hardware with a 1/4" mounting height as shown below. A total of 8 standoffs can be used to mount the yoke adapter.



10. Drill 4 pilot holes for the mounting hardware using a 5/64 bit. The yoke adapter should be mounted on the underside of the control panel as close to the volume or on/off switch as possible as the switch wires are not very long. The easiest way to find the proper hole spacing is to place the yoke adapter on the bottom side of the control panel and pencil mark the hole locations. Painters tape can be placed on the control panel to make the marks more visible. The pilot holes need only be 1/4" deep.



11. Manually thread 4 of the standoffs into the holes.



12. Finally, mount the yoke adapter and secure it with 4 additional standoffs. The power, volume switch and yoke connectors can then be connected to the PCB. The plugs are keyed so they can only fit in the connectors one way. The control panel can then be mounted back onto the arcade cabinet and the ribbon cable can be connected. The game is now ready to play with the Alan-1 yoke! Calibration may be required. Please consult the Arcade1up manual for the calibration procedures.

