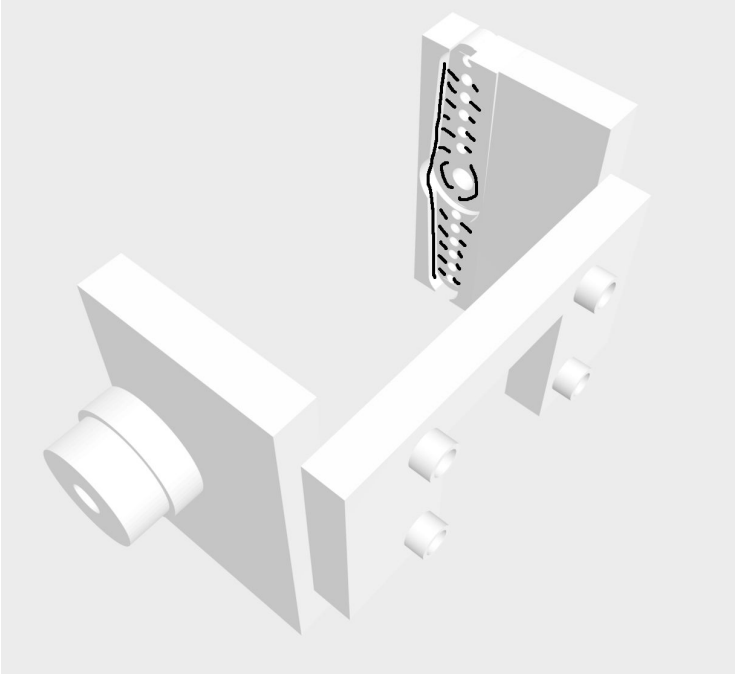
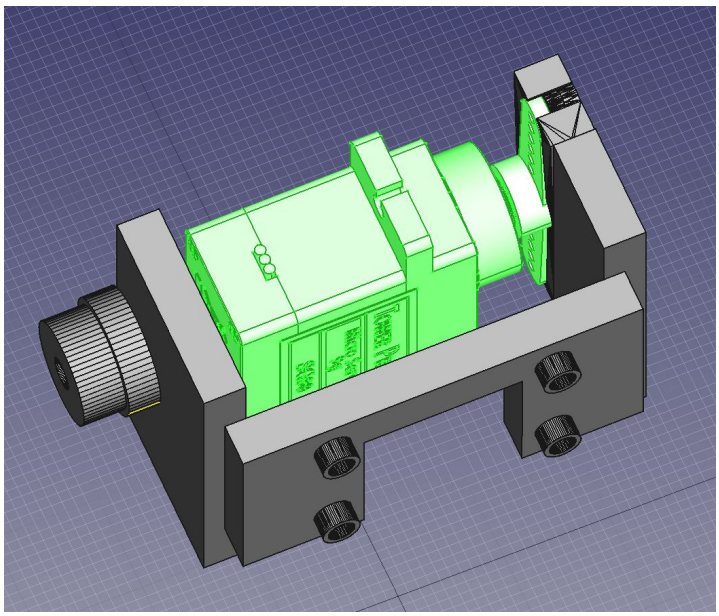
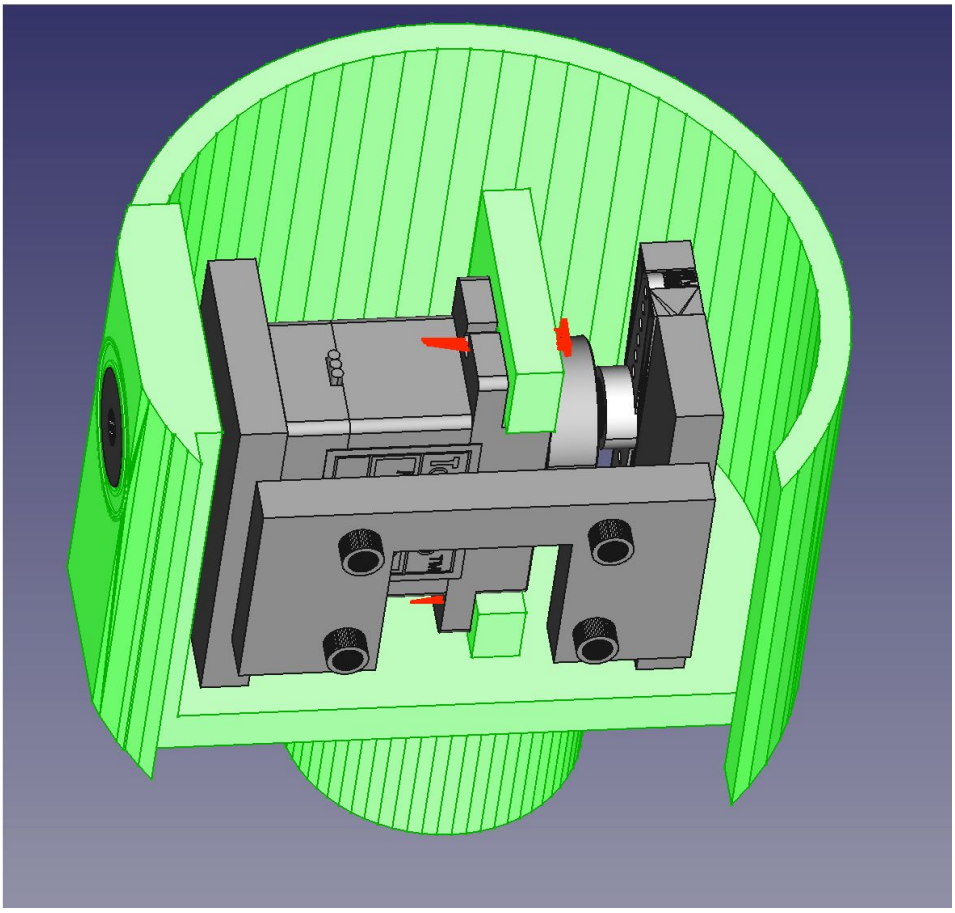
Step 1: Apply some glue in the Camera_PCB_Holder_V3 at the slot shaded in black.



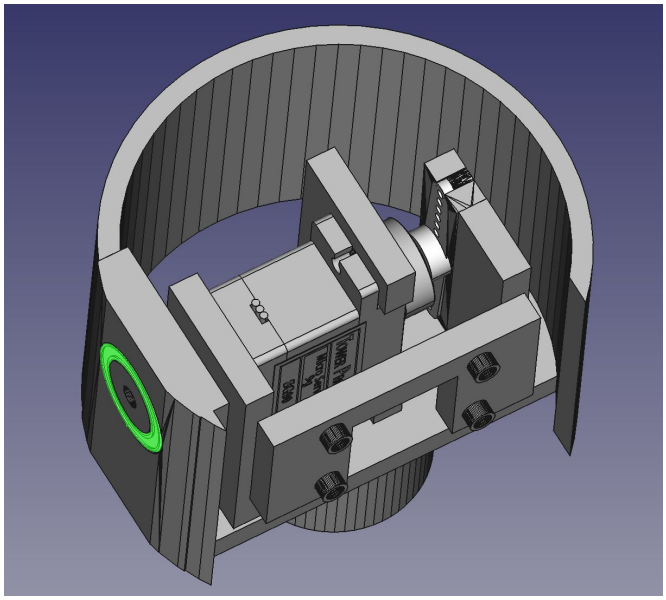
Step 2 : Attach the servo horn to the SG90 Micro Servo 9g servo as shown below, then Place it in the Camera_PCB_Holder_V3 to as shown. Wait for the glue to dry.



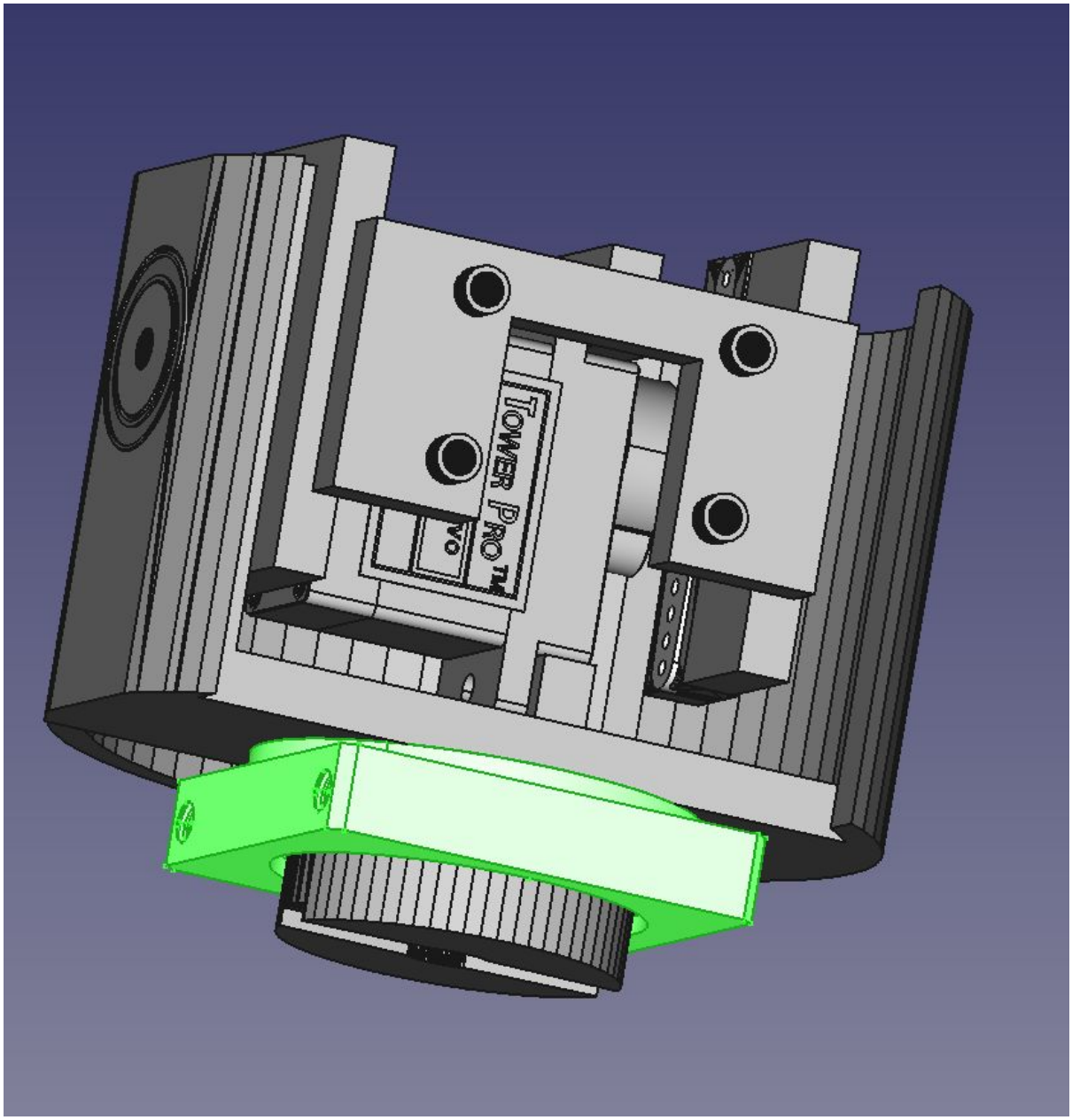
Step 3: Place the Camera_Tilt_Holder around the assembly as shown. Fasten using 2-56” screws shown in red below



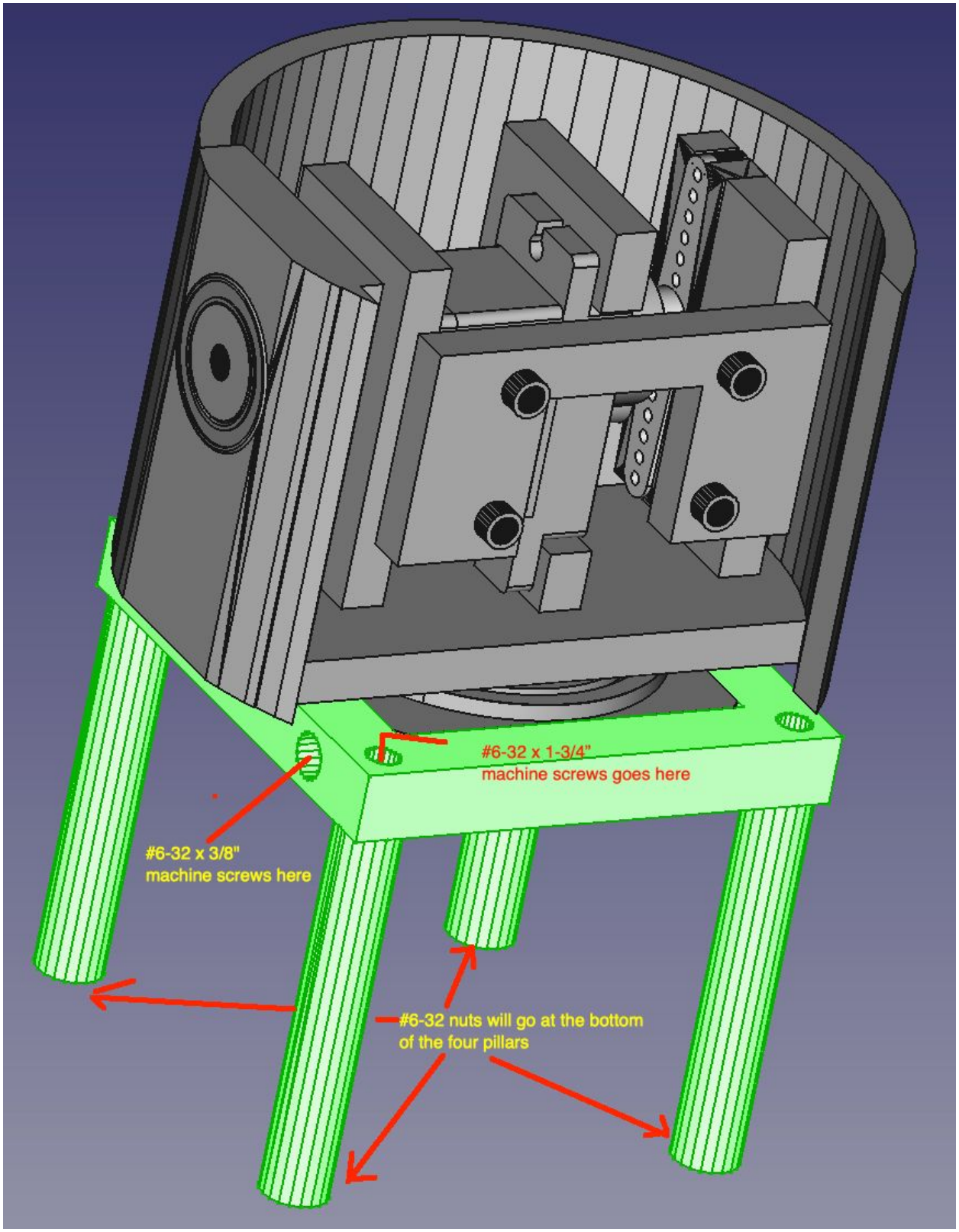
Step 4: Apply some glue on the outer and inner sides of the bearing and insert it at its slot. The “tilt” mechanism is now complete.



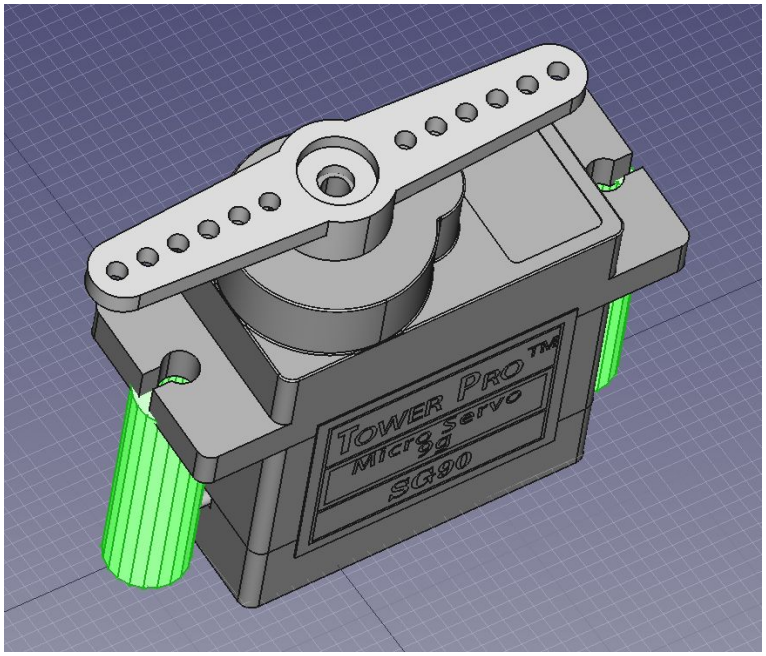
Step 5: Insert the 1" Bore Side Tapped Pillow Block bearing, at the base of the Camera_Tilt_Holder. Note the orientation of the pillow block. The bearing side should be upwards.



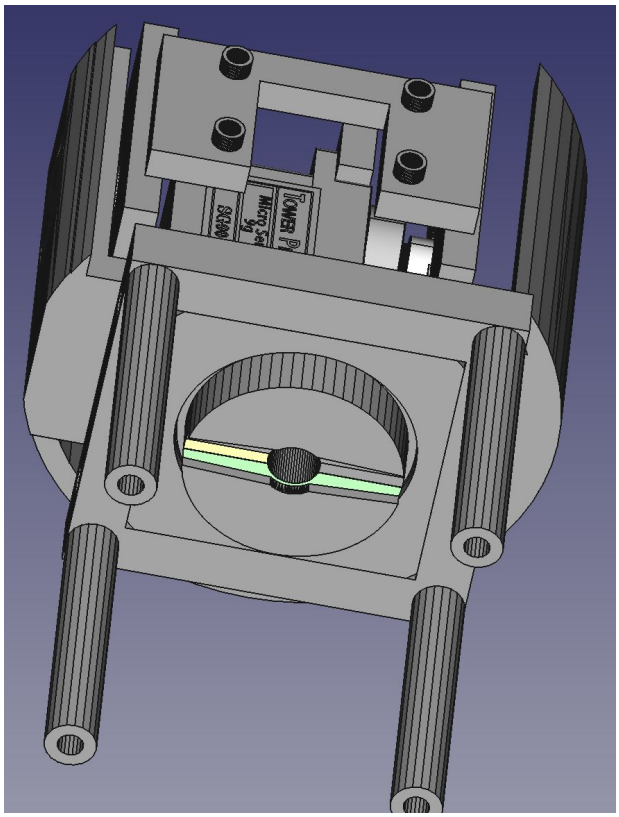
Step 6: Place the pillow block bearing inside the Camera_pan_holder. Use #6-32 x 1-3/4” and #6-32 x 3/8“ screws as shown.



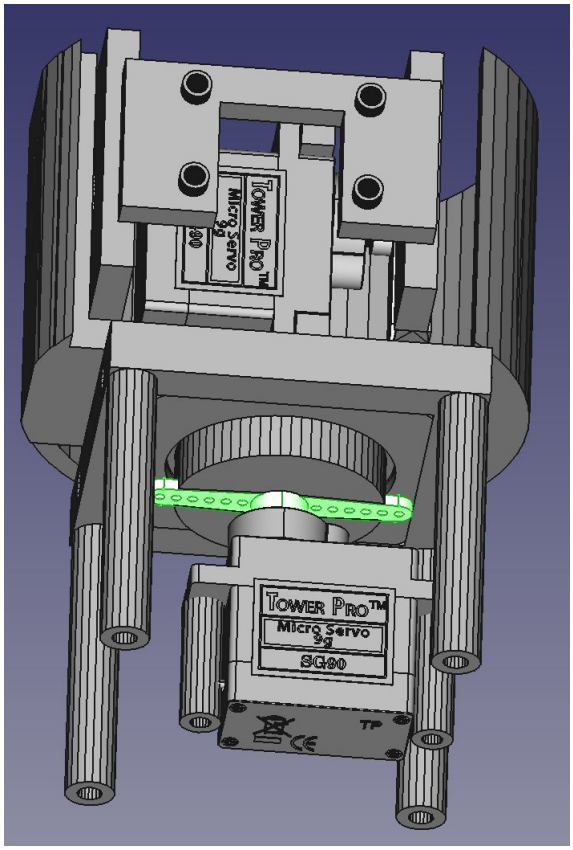
Step 5: Now build the “pan” mechanism. Take the 2nd servo, screw the horn to it (screw not shown here). Also attach the standoffs using #2-56 by 3/4“ machine screws and nuts



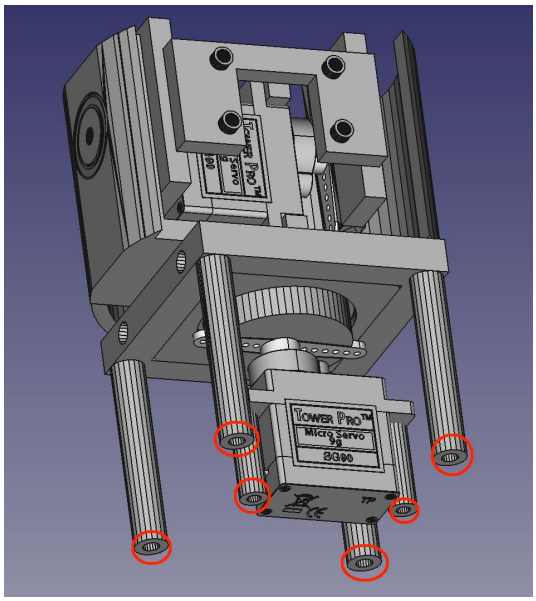
Step 6: Apply glue to the base of the tilt holder



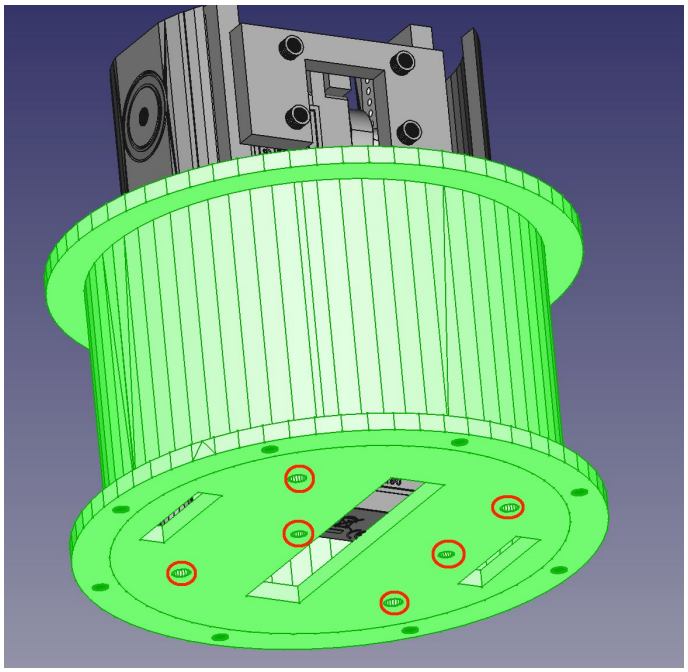
Step 7: Attach the pan servo with horn at the base of the tilt holder. Let the glue dry off.



Step 8: Unfasten the nuts (if there were any) from the positions shown in red circles below. Make sure to keep the screws secured in place. Apply some duct tape over the screw heads temporarily to avoid the screws from slipping out.



Step 9: Insert the whole assembly inside the Camera_Dome_Base. The screws secured in the previous place should now reach out through the holes shown below in red. Apply nuts to fasten.



Step 10: Install the raspberry pi Camera V2 using #2-56 screws