

Thank you for purchasing the [www.crafthub.io](http://www.crafthub.io) Active Suspension Conversion kit



### **Gyro controlled Camera Gimbal for 1/10 touring/drift car chassis kit.**

This is a camera stabilizer for very low angle mounted action camera like Gopro Hero9. It can take a very scale like smooth video footage. The camera pan control is automatically adjusted by Gyro. This stabilizer also adds FPV system and 2Ch RC control system, so you can control the camera angle by manually.

#### **Note**

This data is optimized for yokomoDP, if you want to use another chassis, I will cooperate with you to fit your chassis. Please contact me.

#### **Data kit**

You have to print out all parts by yourself. The material you should use ABS or ColorFab HT, etc. otherwise the parts don't have enough rigidity. PLA is not recommended. Summer season in outdoor, the parts don't use practically.

## **Future**

- Design for 1/10 scale model Yokomo DP TamiyaTT01 Ktrack etc.
- It has Oildumper and wire coupling
- FPV system available
- FPV camera and Gopro integrated adapter.
- Short battery box on rear diffuser (Yokomo chassis)

## What is contained in this kit?

Parts list of this kit

STL parts list (kit)			
PartsNo	Filename	Material	Printout quantity
1	Adjusterbase.stl	refer	1
2	Adjusterscrew.stl	refer	2
3	Balkhead.stl	refer	1
4	Battelycase.stl	refer	1
5	Dumperarm.stl	refer	2
6	FPVcameramount.stl	refer	1
7	Frame.stl	refer	1
8	Gimbal holderA.stl	refer	1
9	GimbalA.stl	refer	1
10	GimbalB.stl	refer	1
11	GimbalC.stl	refer	1
12	GimbalD.stl	refer	1
13	GoproMountforServo.stl	refer	1
14	Servo holderV2.stl	refer	1
15	Servodeck.stl	refer	1
16	ServomountforDeck.stl	refer	1
17	Springcorn.stl	refer	2
18	Switchpanel.stl	refer	1
19	WiredumperA.stl	refer	1
20	WiredumperB.stl	refer	1
refer	Not recommend to use PLA We recommend ABS or ColorfabHT		

## What you need without this kit

What you need without this kit			
	parts list	quantity	note
	0.8mm steel wire 1 m	1	
	Ball end 4.8mm	4	
	Ballbearing 3*8*3	8	
	Carbon rod Dir 6mm 1 m	2	
	low profile steering servo	1	
	M3*8 Countersunk screw	9	
	M3*10 Countersunk Screw	4	
	M3*12 Countersunk screw	2	
	M3*18 Bottun screw	1	
	M3*20 Capscrew	4	
	M3*40 countersunk screw	1	
	M3*8 Capscrew	6	
	M3*10 Capscrew	6	
	M3*40 screw	4	
	M3 sim	afew	
	Steering Gyro for DriftCar	1	
	Tamiya cva mini shock unit cylinder (4PCS.) OP-619	1	
	Ubec 10A	1	

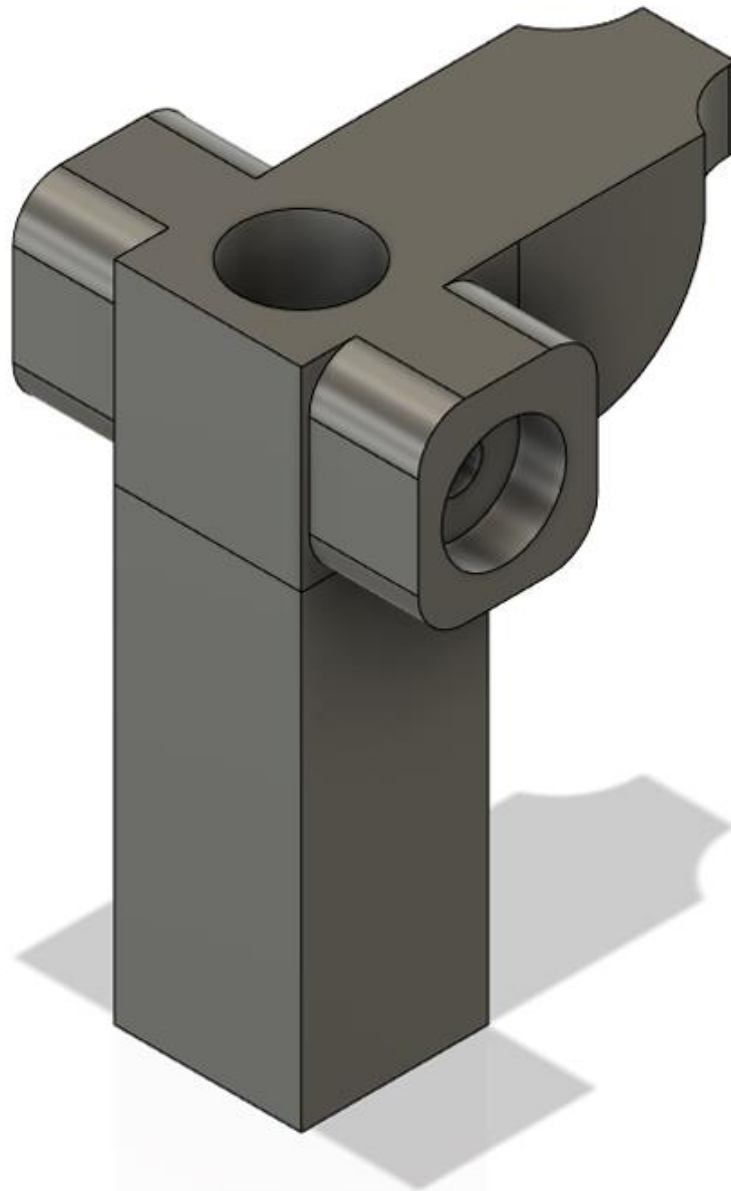
If you want to add FPV system and manually controlled camera to pan

Option plan			
	FPV system	1	
	2Ch RC system	1	
	High grade oil dumper	1	
	25Kg high torque servo	1	

Camera Gopro hero6 or later. Gopro hero9 should be best.

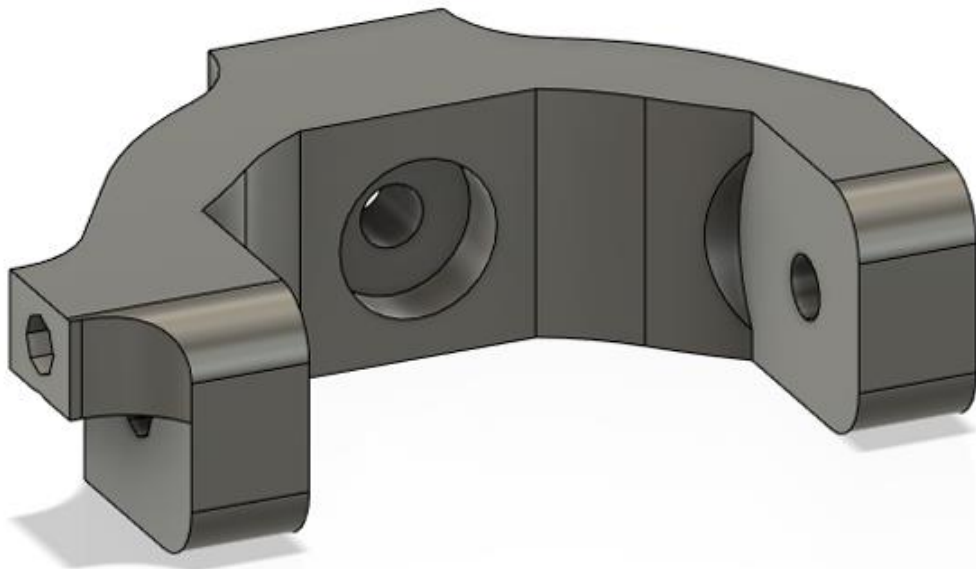
## Construction manual

1,



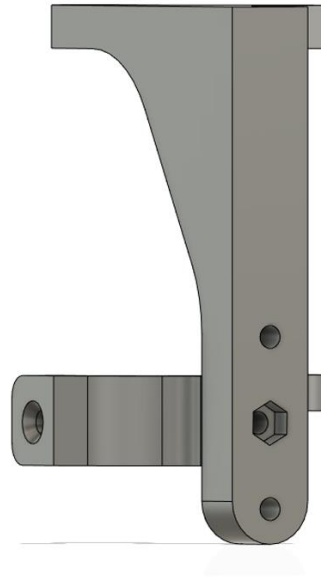
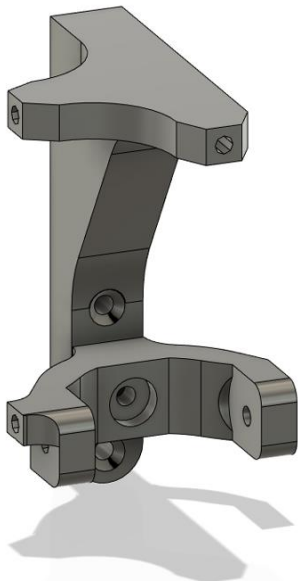
1. Connect GimbalB and GimbalC using 3\*10 countersunk screw.
2. Insert 3\*8\*3 ballbaring

2,



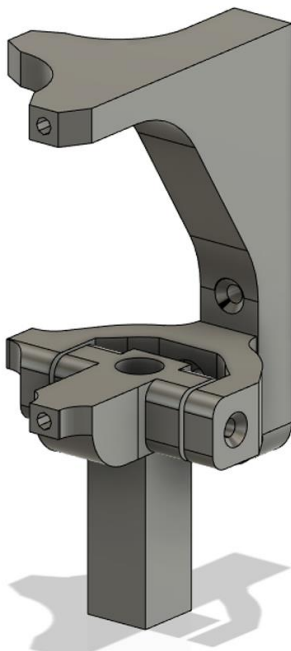
Insert 3\*8\*3 ball bearing.

3



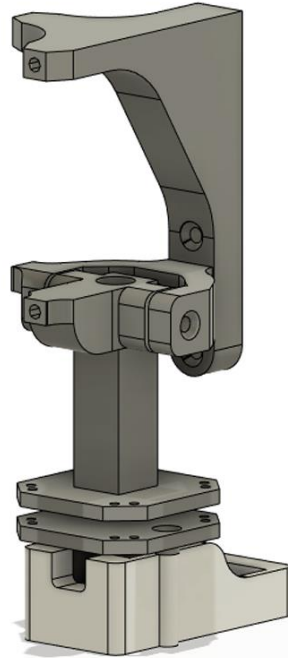
1. Install a nut on Gimbal D and fix the Gmbal A using M3\*18screw.use sim to move Gimbal A smoothly

4



Use M3\*40 countersunk screw. Please take care Gimbal A's damper mount side only have a thread.  
Use a few sims to move gimbal smoothly.

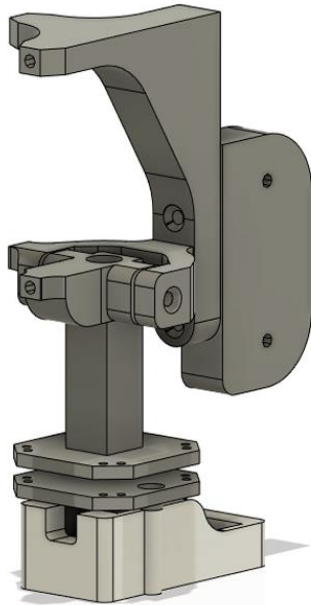
5,



Fix WireDumperA to Gimbal using M3\*10 Counter sunk screw.  
Install the servo to servoholder.

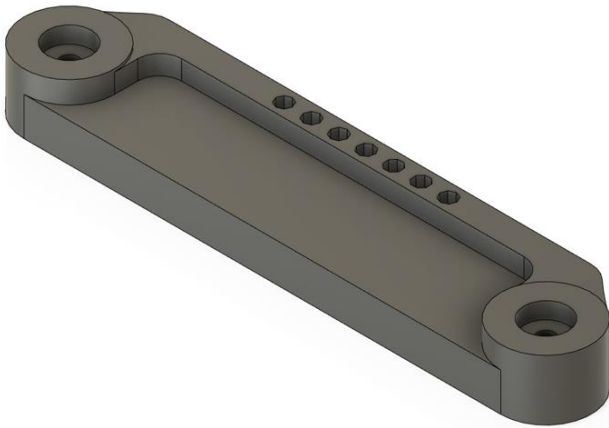
Insert the M3\*10 countersunk screw to WireDumperB, and then stretch wire dumper A and B with 0.8mm steel wire.

6,



Fix the gimbal with Gimbalholder A with M3\*12 countersunk screw.

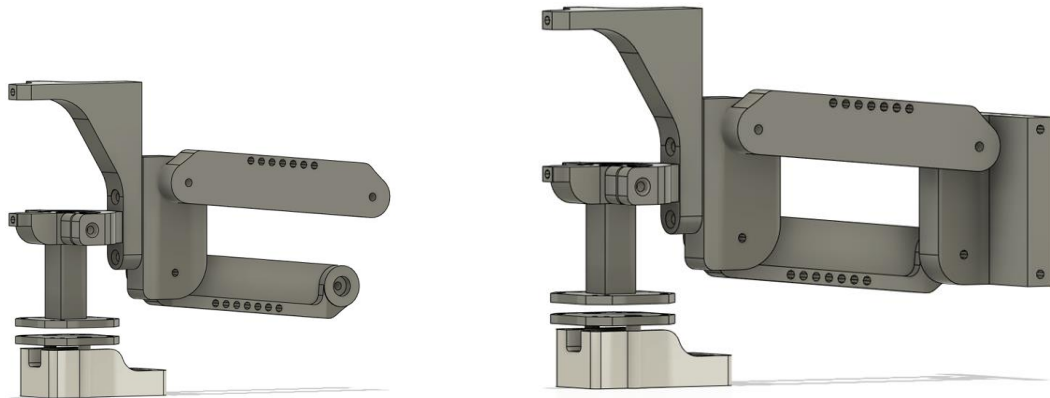
7,



Make this arm\*2  
Insert 3\*8\*3 Ballbearing.

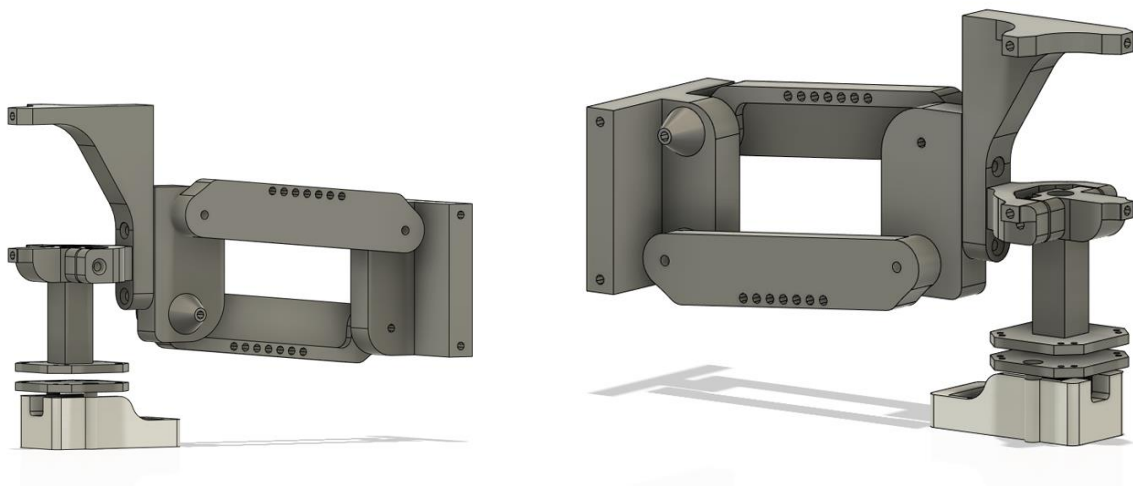


8,



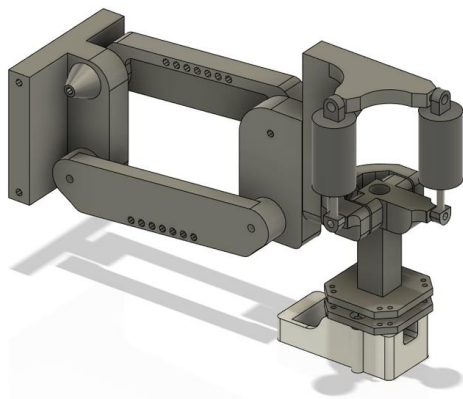
Attach the arms and bulkhead with M3\*20 Capscrew. Those arm should move smoothly.

9,



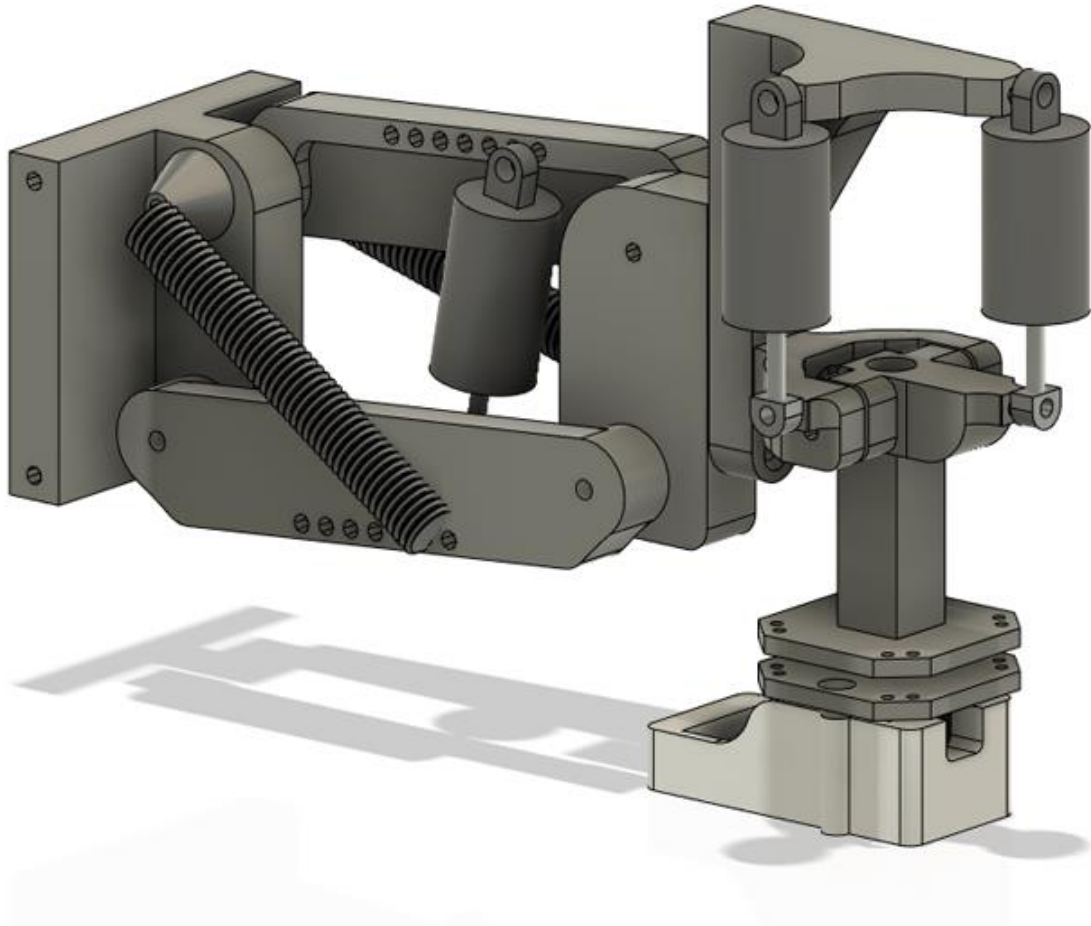
Fix the spring corn with M3\*20 Cap screw.

10,



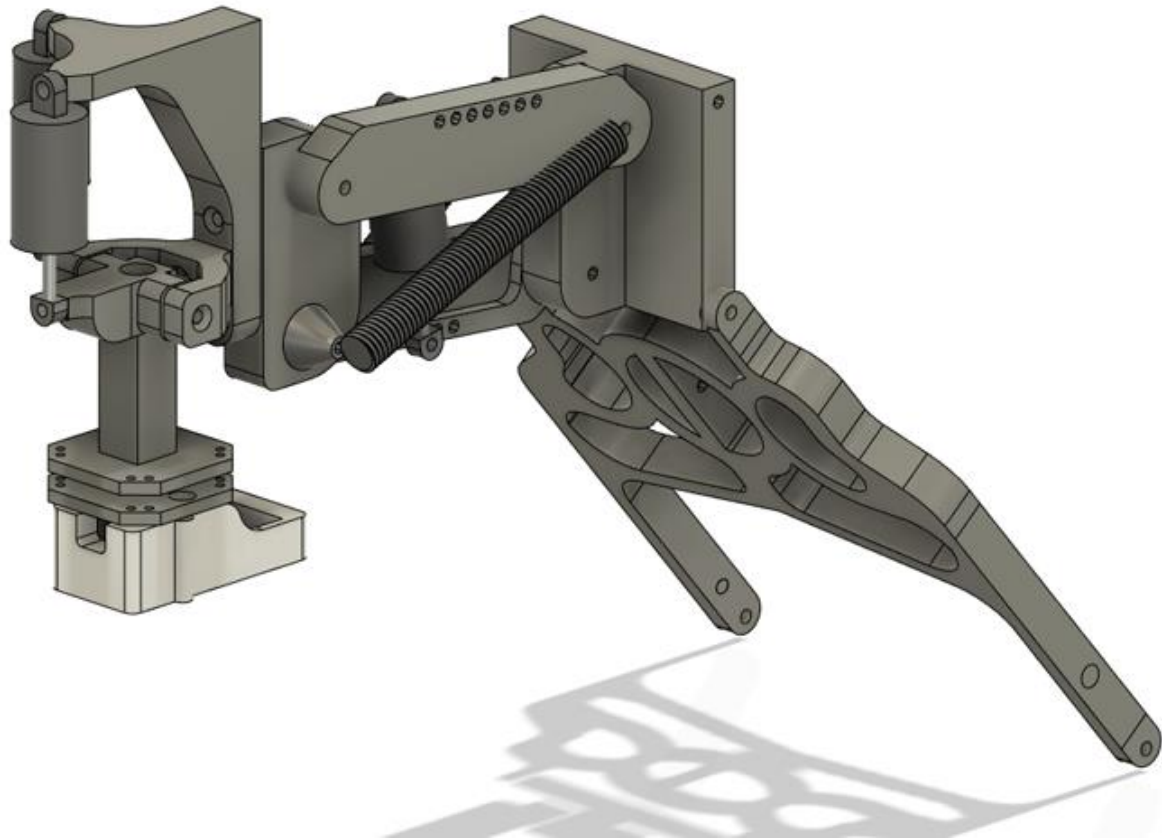
Set the oil Dumper

11,



Set the arm Dumper. This dumper should use high viscosity oil.  
Also, set the spring. Depend on Camera weight, you chose suitable hole.

12,



Fix the Frame and bulkhead with M3\*10 Capscrew.

## Where to mount the chassis ?

This is a very important issue. The best place is the center of gravity. However, it may difficult to mount the CG. Please take this point into consideration and decide the mounting point.



## 13.

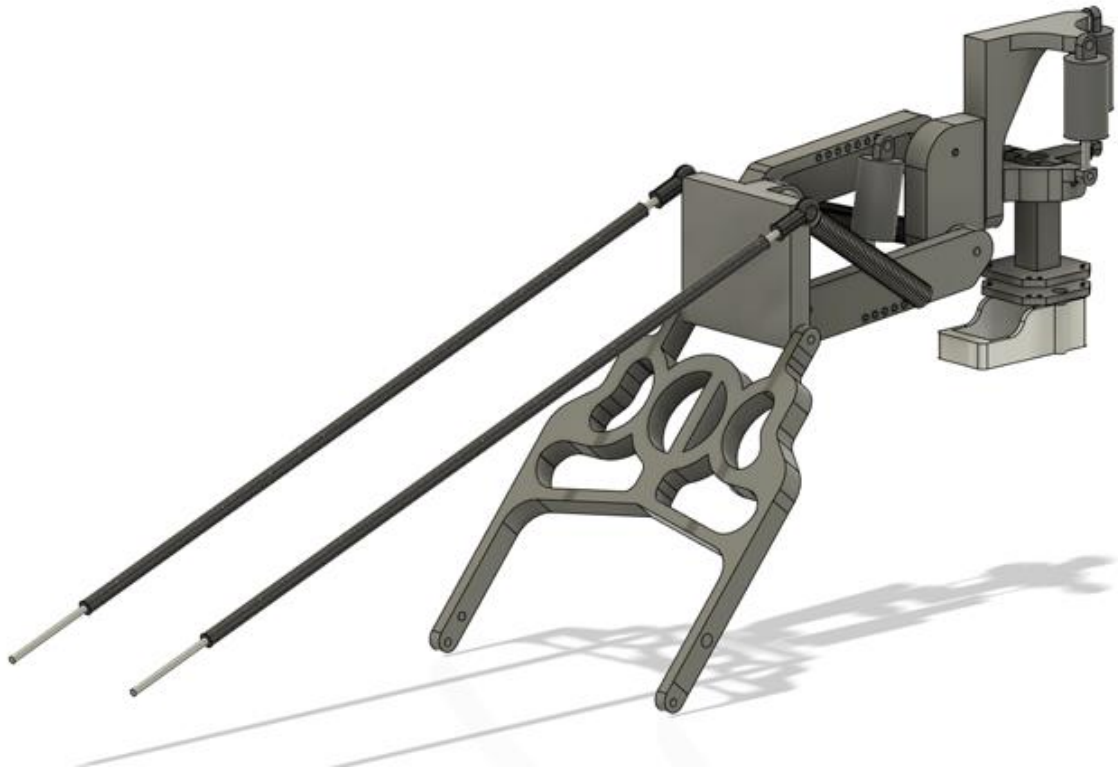
Make a carbon rod



Depend on the Frame mount position, you have to cut carbon rod to a suitable length. Cut M3\*40 screw heads, and fix carbon rod with epoxy glue. After cure, cover those parts using shrink tube.



14,



Connect the carbon rod to the bulkhead.

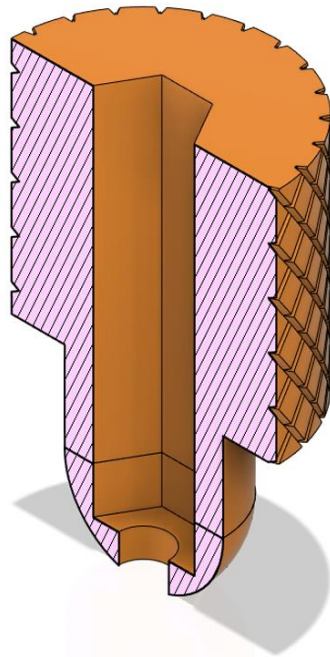
15,



Fix adjusterbase on strut dumper stay with M3x10Capscrew

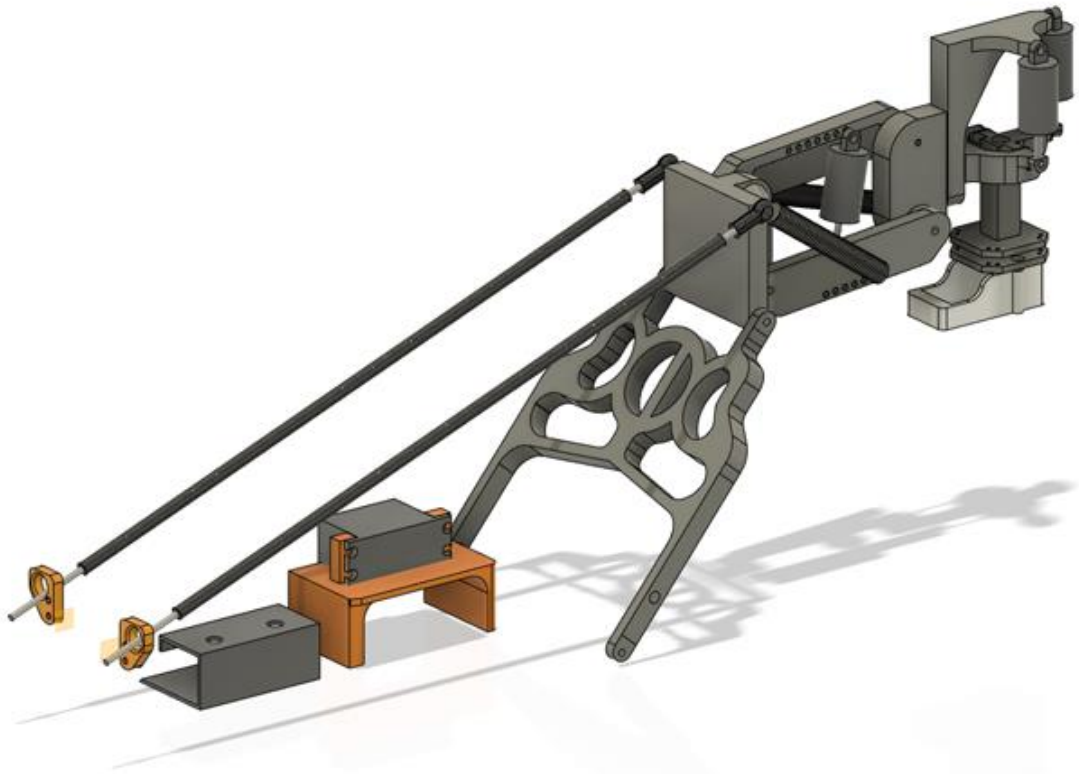


16,

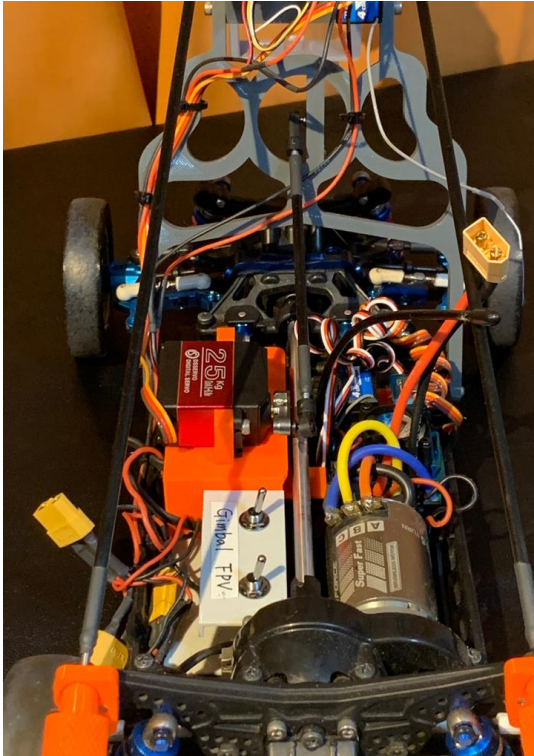


Install M3 nut in adjuster knob, then set the carbon rod.

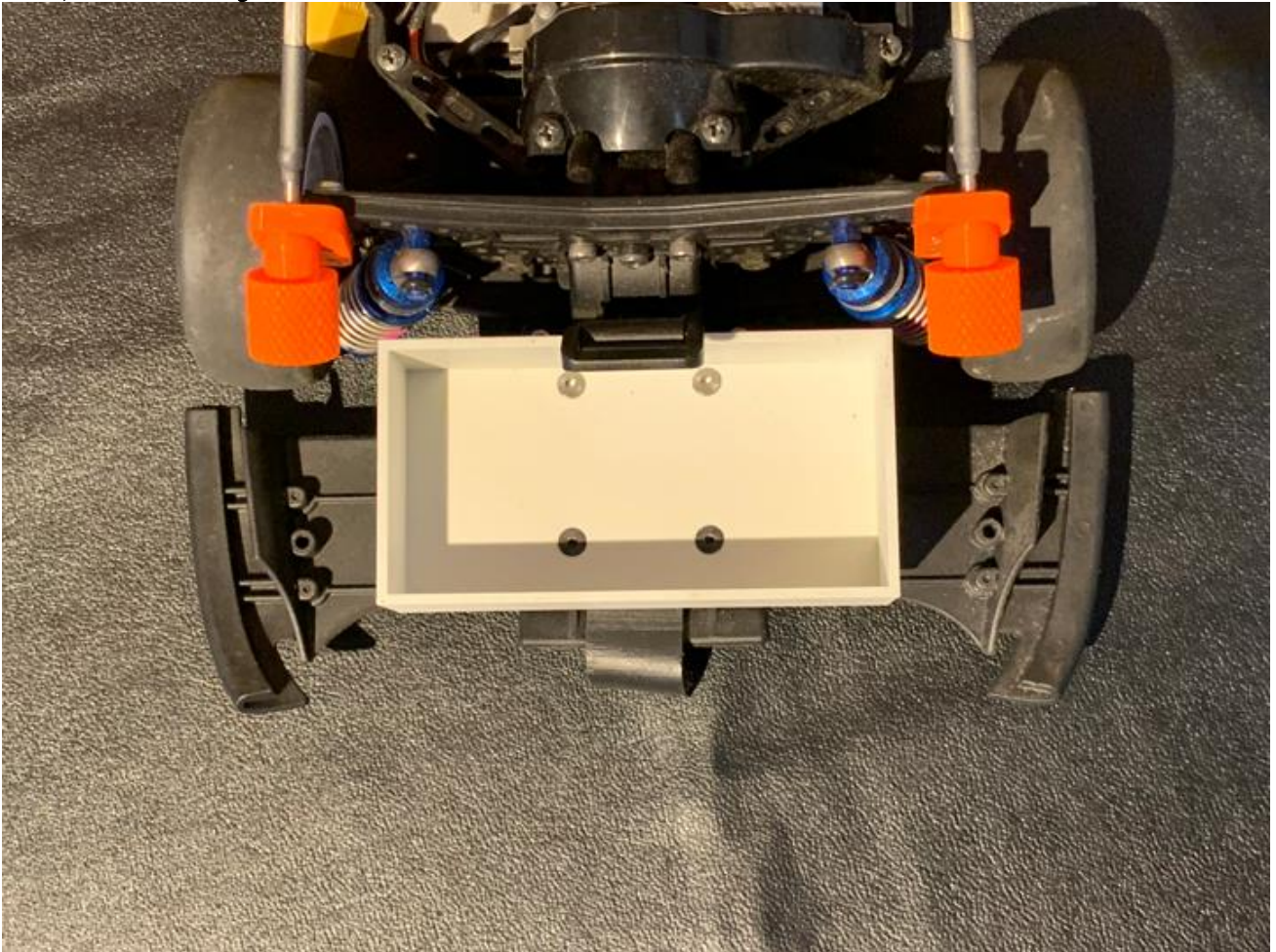
## 17,Tilt servo/ switchpanel



Build with M3\*8 countersunk screw fix the servo with M3\*8Capscrew

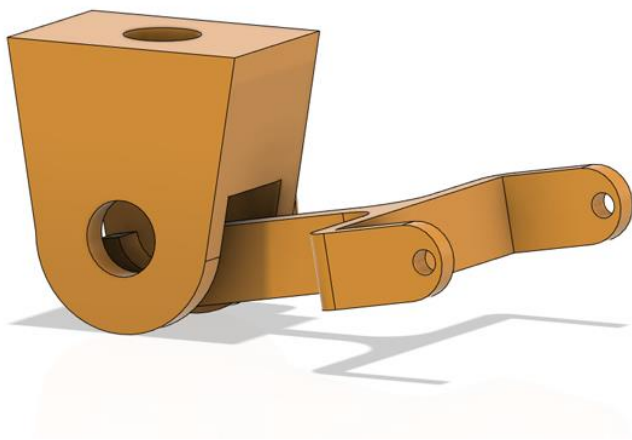


## 18, battery case



Bolt on a battery case on diffuser With M3\*10 Countersunk screw

## 19, Gopro camera mount



Direct mount on servo . fix with servo genuine screw.



**Disclaimer**

Do not use this file for commercial purpose without any permission.

This model was made FDM 3Dprinter, the parts have some additive markings, however, no problem for those parts function.

We use/recomend ColorfabbHT firmament

<https://colorfabb.com/colorfabb-ht-tritan>

If you have any question, please contact is via a form.

<https://www.crafthub.io/contact-us/>

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