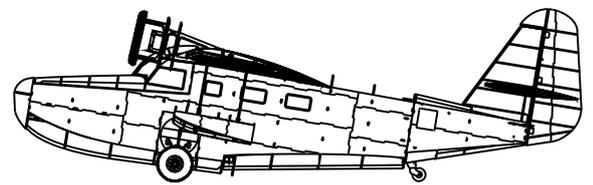
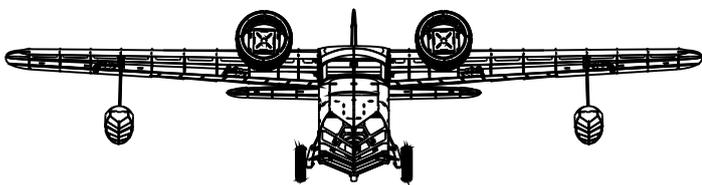
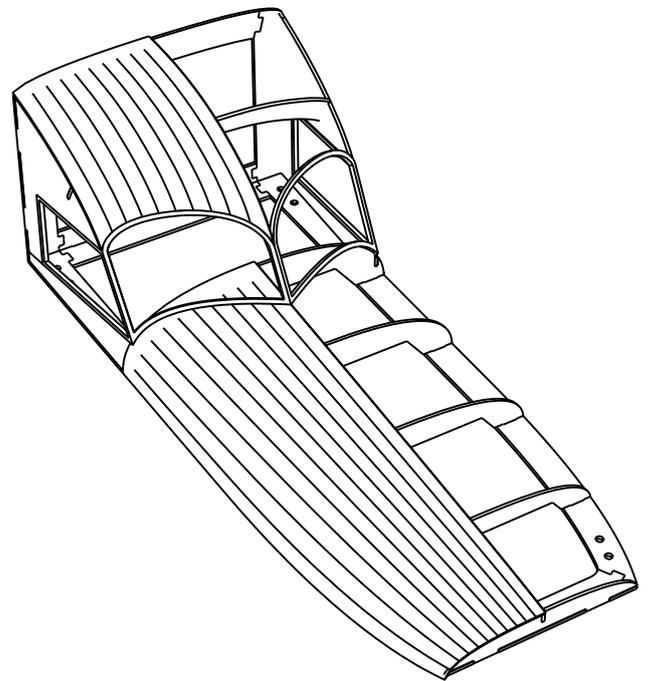
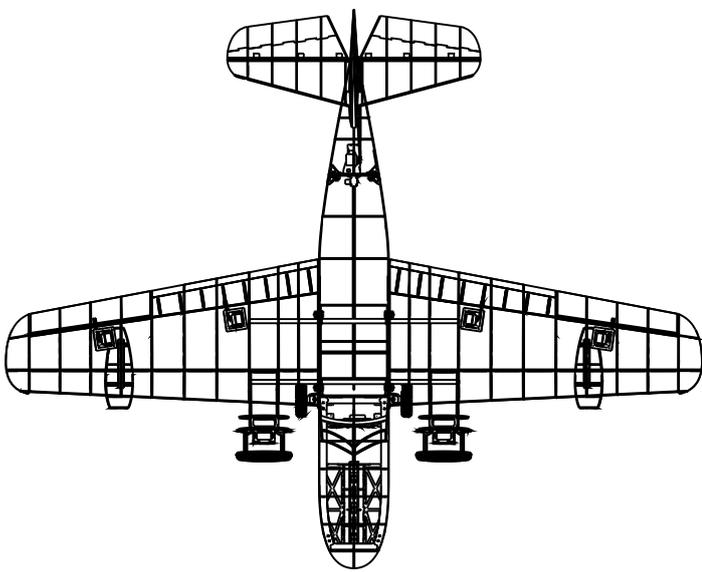
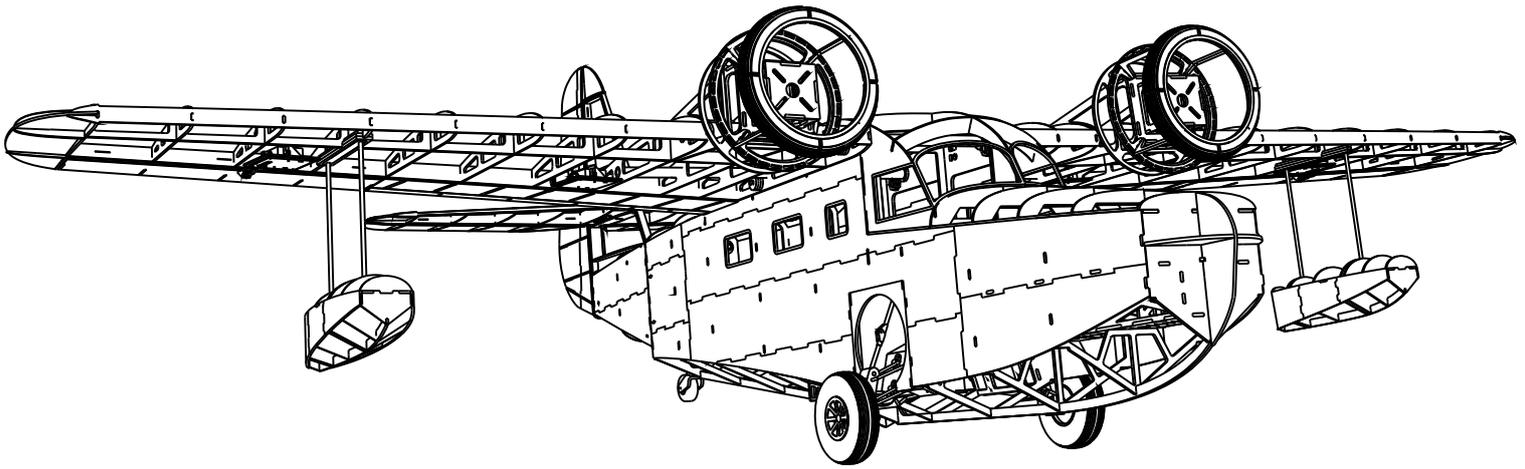


Goose V2



Introduction

Thank you for choosing the GooseV2 as your project, I hope you have much fun building and flying this model. Before you start with the build I recommend to read through this manual and watch all the GooseV2 build videos on my YouTube channel. Also, the build thread on RcGroups contains many pictures from the prototype build and is a useful course of information. This book covers the build step by step but I did not make instructions for scale details etcetera, these will have to be scratch build to your own desire. Also, obvious things such as trimming sheeting and sanding ribs and former edges to follow the model's curvature are not mentioned as I assume you will understand that needs to be done.

The build is divided in several chapters, each begins with a hardware list for that build stage. Some parts will have to be cut to size from a supplied length of material, the wing tubes and pushrods for example. The exact dimensions can be found in the hardware list. Also, which type of glue needs to be used is not mentioned. I recommend medium CA for balsa to balsa, waterproof wood glue for ply to balsa and ply to ply joints. Use epoxy or CA with filling powder on high stress joints.

Waterproof wood glue is also used for balsa to balsa large area joints such as gluing the wing spars. The CF and brass tubes can be glued in place using medium CA, I found that this works very well. Thin CA is used for hardening the wood surrounding a screw hole, the servo cover screw holes for example.

To build the Goose a 100% flat building board 120x60cm fits the job, use waxed paper to cover it and preventing you from gluing the model to the building board.

If you take a close look at a laser cut part you will see that the cutline is not 90 degrees. The cut is wider where it enters the wood. Use this to your benefit when deciding in which direction to orient the parts.

The book has instructions for flaps, however if the model is built light, they are not necessary. If you choose to use a glass cloth finish instead of covering film and the AUW is around 6kg it is recommended to equip the Goose with flaps.

Make sure you completely understand each build stage before gluing any parts together.

When the build is ready finish the model with covering film and for the area below the waterline use glass cloth and resin. Then setup the radio system and your ready to go. It is probably best to do some sea trials before attempting maiden flight. I found that is a good way to get used to a flying boat before actually flying it. This helps you relax for the maiden itself. When flying off water you will experience that the goose gets on step very easy. Landing without bounce is bit trickier, a very slow rate of decent is demanded for a nice landing. Try to have the center of the step hit the water first with a high angle of attack and some power on. It takes practice to get it right.

After each season the landing gear need maintenance. The brass tubes all need to be cleaned and lubricated. Also give all the metal parts a coat of CorrosionX every now and then to prevent them from rusting.

But all this is many building hours away so let's get started

On YouTube look for GooseV2 and you'll find the video series on my channel (Bart83)

Link to GooseV2 playlist:

https://www.youtube.com/playlist?list=PLkpKj72K3uYmgntGXOHDq5Y_r17no_eFl

Link to prototype build thread :

<https://www.rcgroups.com/forums/showthread.php?3515473-GooseV2-new-lasercut-kit>

If you have any question about the GooseV2 feel free to email me at Flyingdutchmanplans@hotmail.com

For questions about the kit contact Sebastiaan (owner RC-Europe.eu) at rceuropeorder@gmail.com

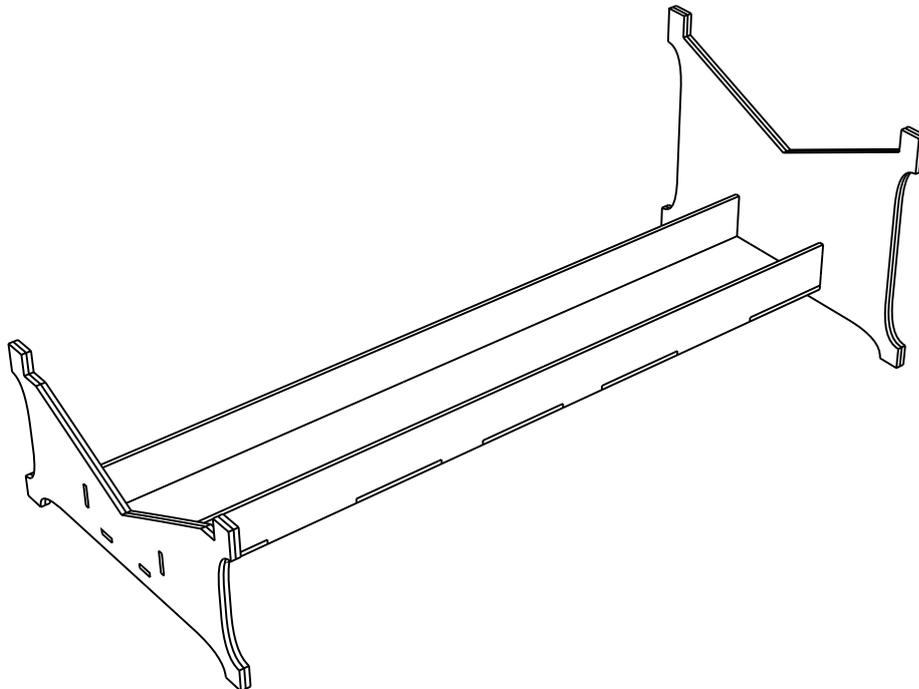
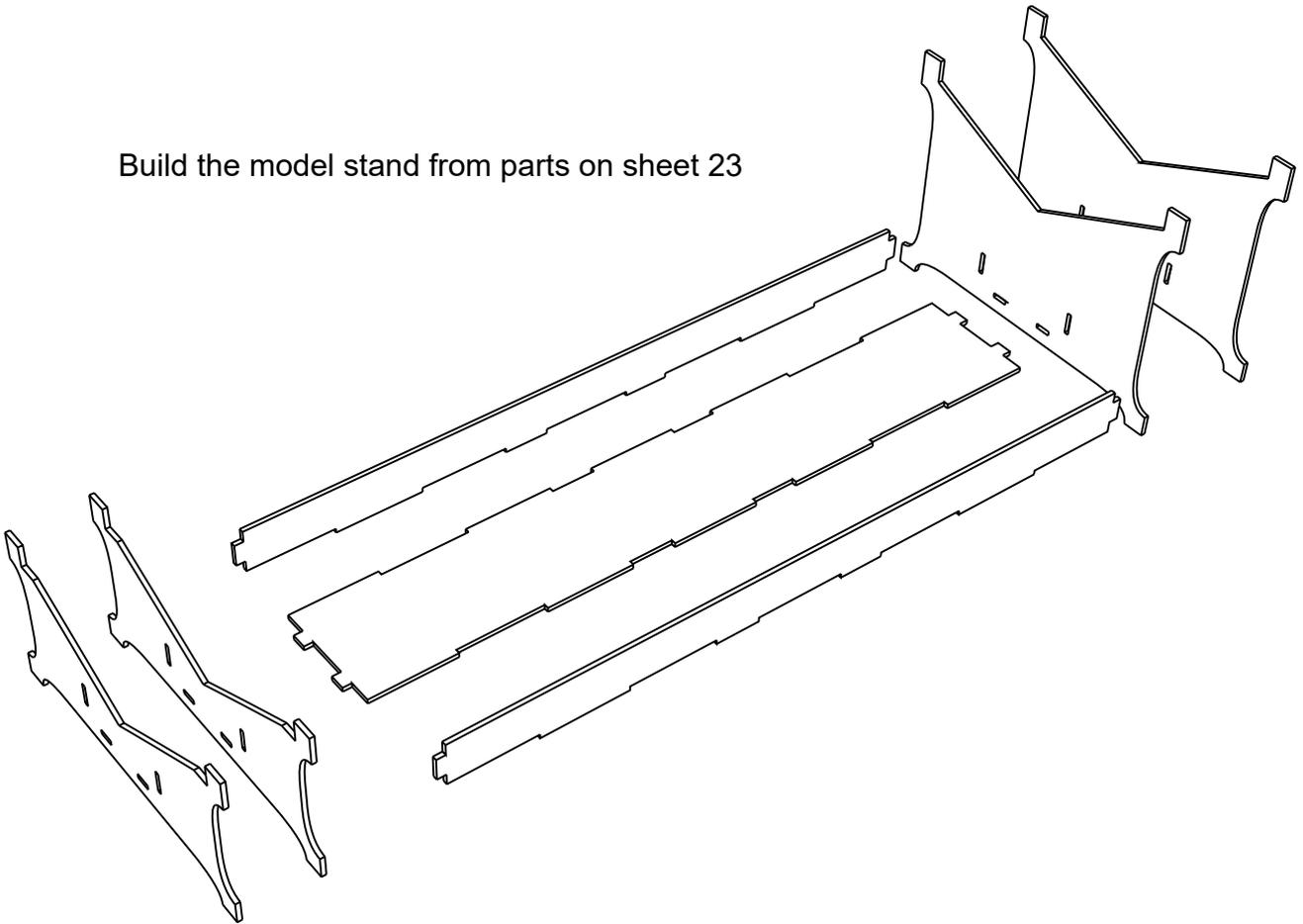
Enjoy the build,

Bart Lammerse

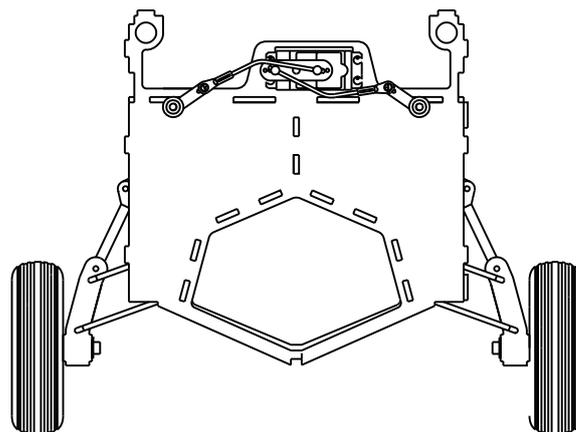
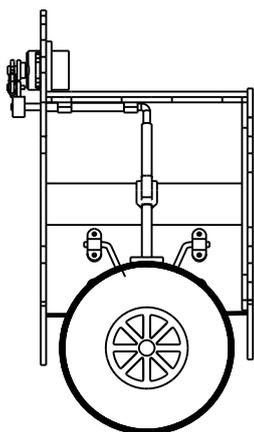
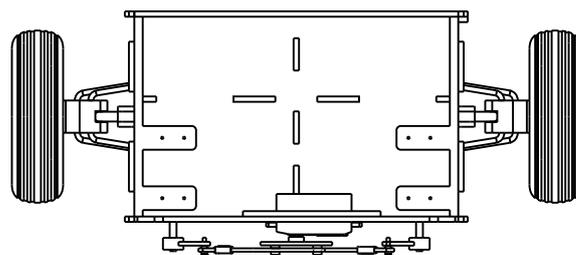
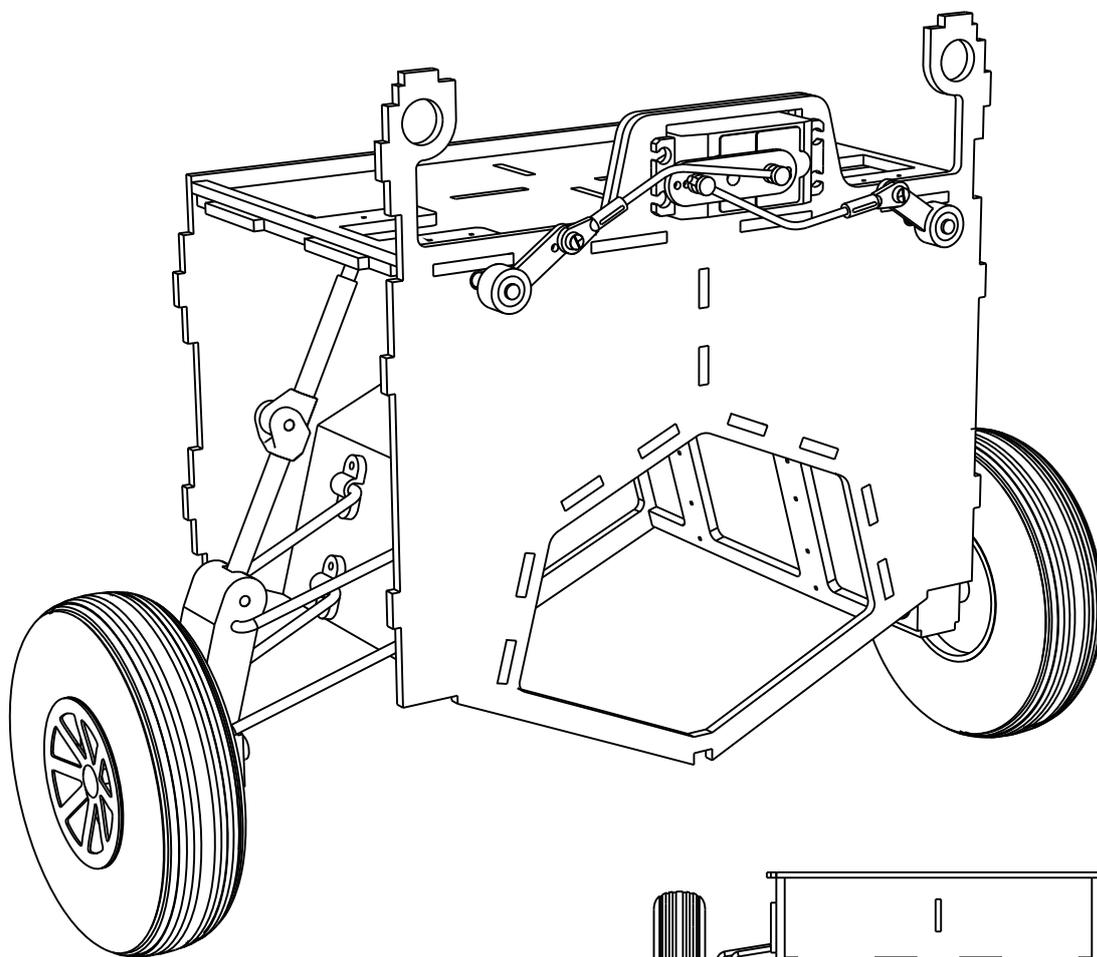


Bart83 (RcGroups user name)

Build the model stand from parts on sheet 23

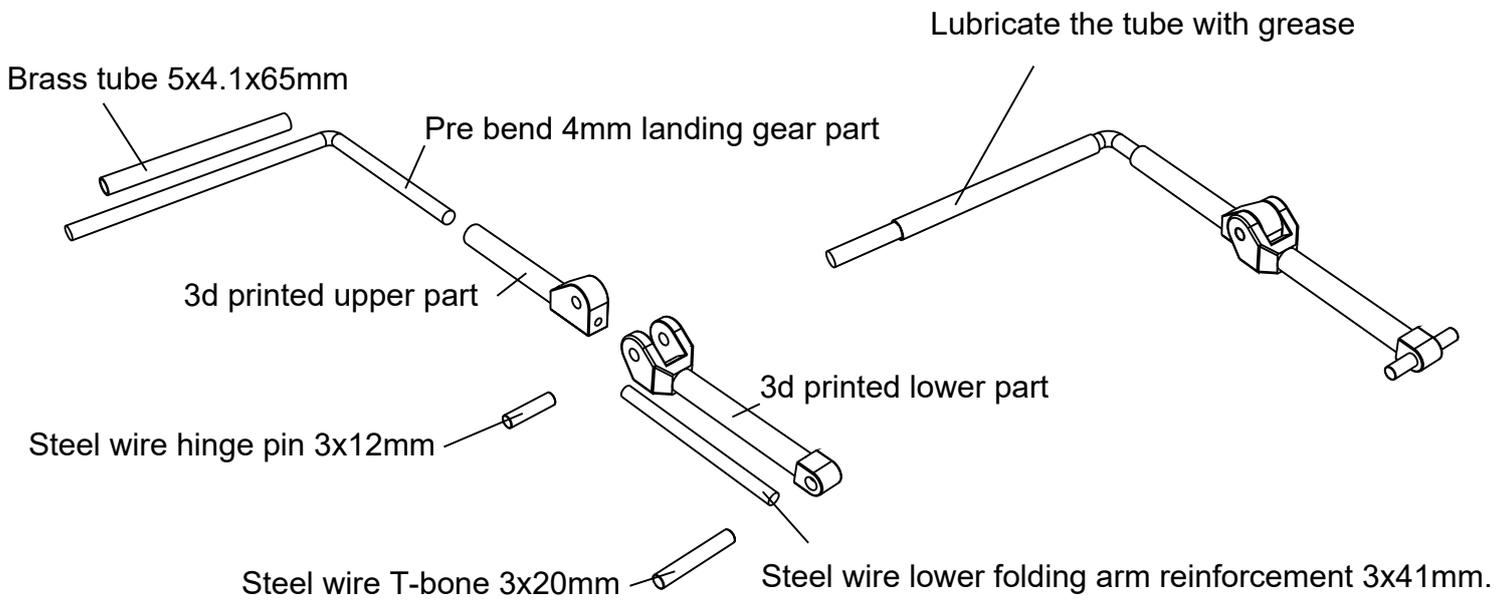


Main Landing Gear Unit

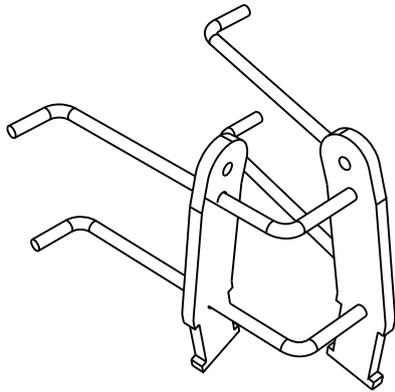


Hardware for this build stage

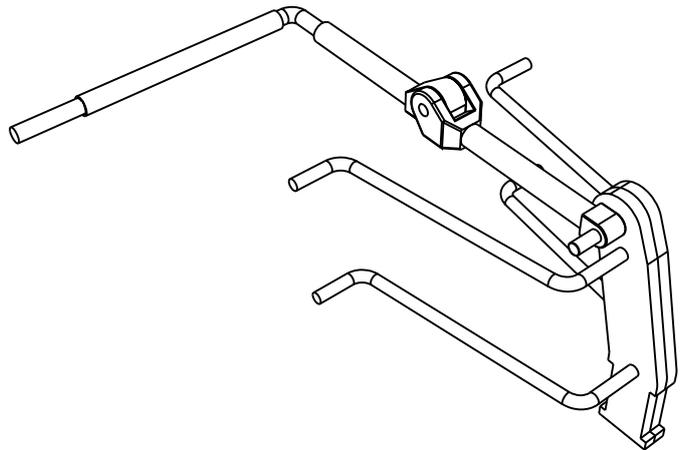
2x	Pre-bend upper folding arm	4mm	steel wire
4x	Pre-bend suspension arm	3mm	steel wire
2x	Upper folding arm		3d printed part
2x	Lower folding arm		3d printed part
2x	Lower T-Bone	3x20mm	cut to from supplied steel wire
2x	Folding hinge pin	3x12mm	cut to from supplied steel wire
2x	Lower folding arm inner	3x41mm	cut to from supplied steel wire
2x	Inner axle	M4x55mm	Stainless steel allen bolt
2x	Outer axle	5x4.1x22mm	Cut from supplied brass tube
2x	Wheel locking nut	M4	Stainless steel
10x	Washer large OD	M4	Stainless steel
2x	Folding arm sleeve	5x4.1x65mm	Cut from supplied brass tube
8x	Suspension arm tube	4x3.1mm	Cut from supplied brass tube
4x	Du-Bro gear strap	3/16	+ screws
8x	Du-Bro gear strap	5/32	+ screws
2x	Nylon steering arm	4mm hole	
2x	Threaded pushrod	M2	Cut to correct size
2x	Ball-link	M2	
2x	Machine screw	M2x12mm	Stainless steel
2x	Nut	M2	Stainless steel
2x	Washer	M2	Stainless steel
2x	Dubro EZ connector	.22"	Heavy Duty
1x	Hitec HS-75BB Retract servo		+ mounting hardware
2x	Du-Bro Lightweight wheel	4"	



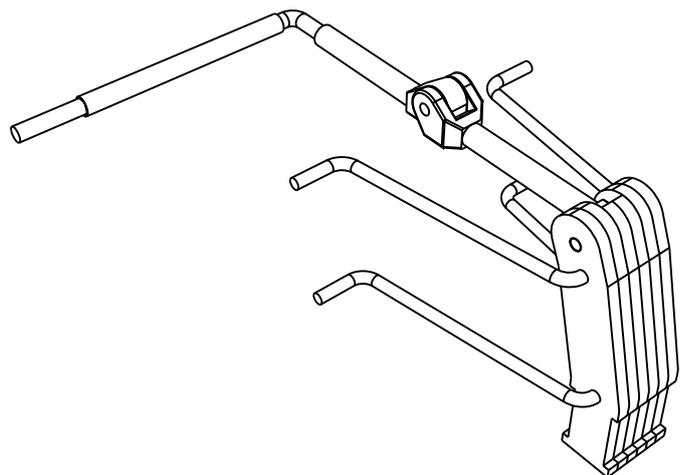
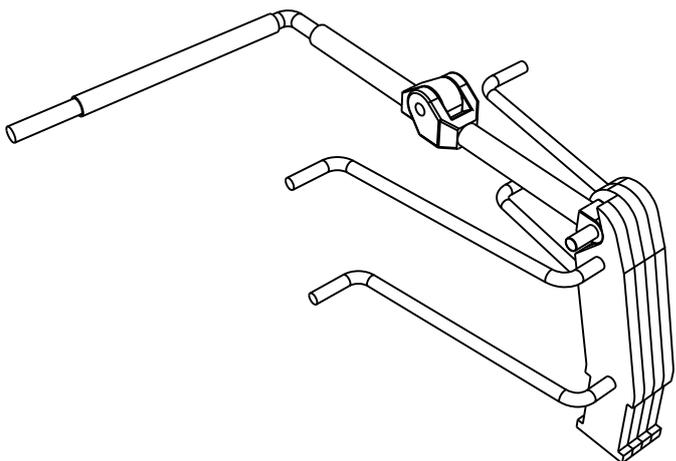
Slide the first two axle member parts on the suspension arms



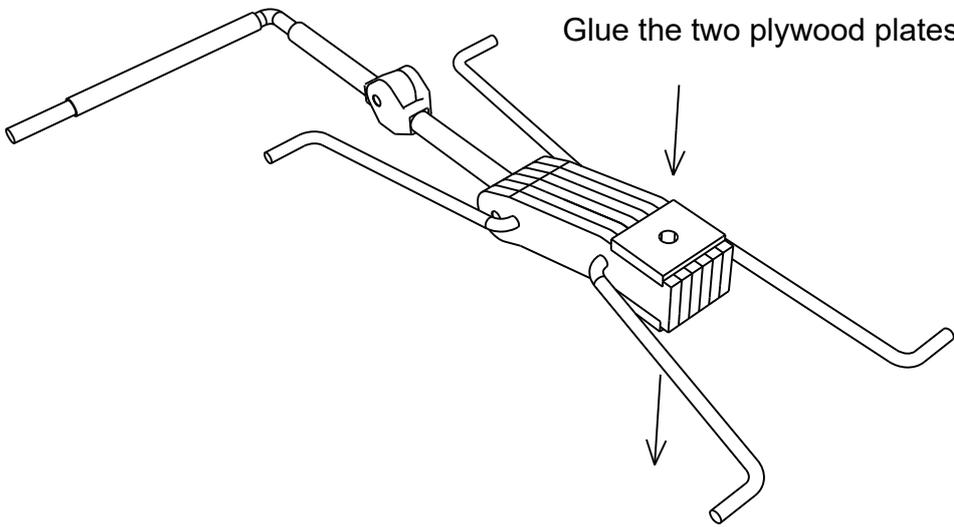
Position the previously build folding arm



Slide the remaining axle member parts in place and glue assembly, make sure to have the parts aligned correctly!



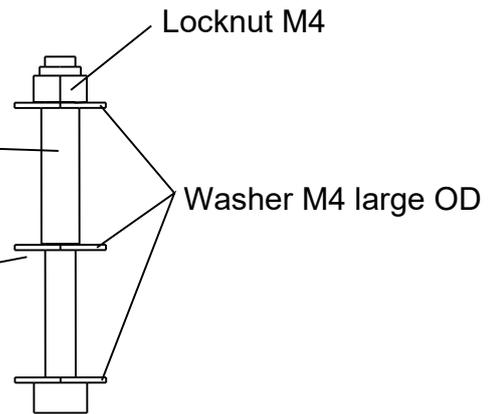
Glue the two plywood plates to the axle member and drill 4mm hole



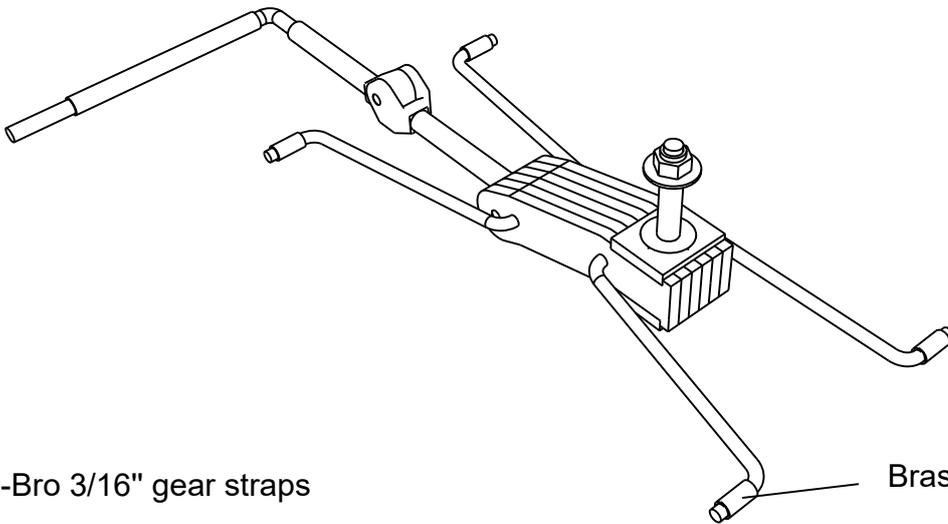
Brass tube 5x4.1x22mm

(length may be different when not using Du-Bro wheels)

Use more washers if wheel does not clear axle member

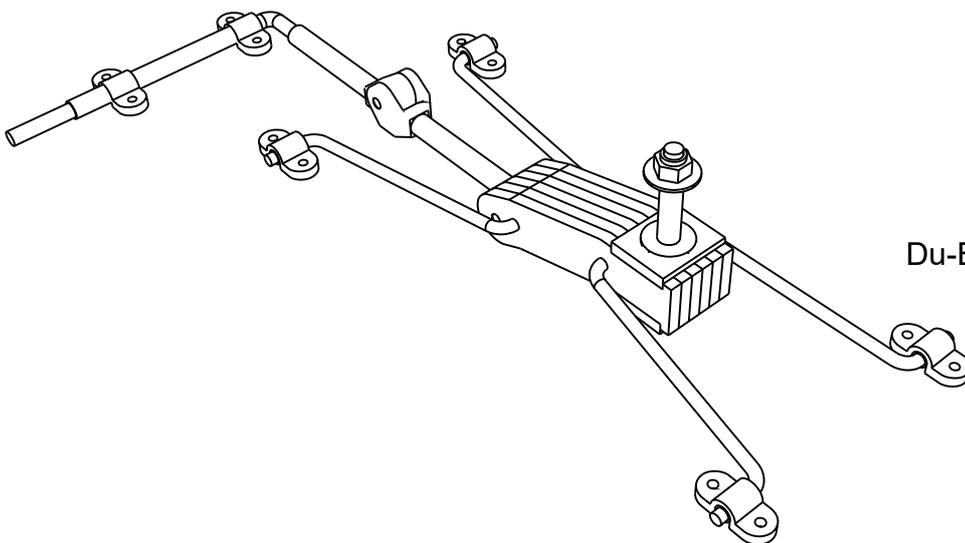


Allen bolt M4x55mm

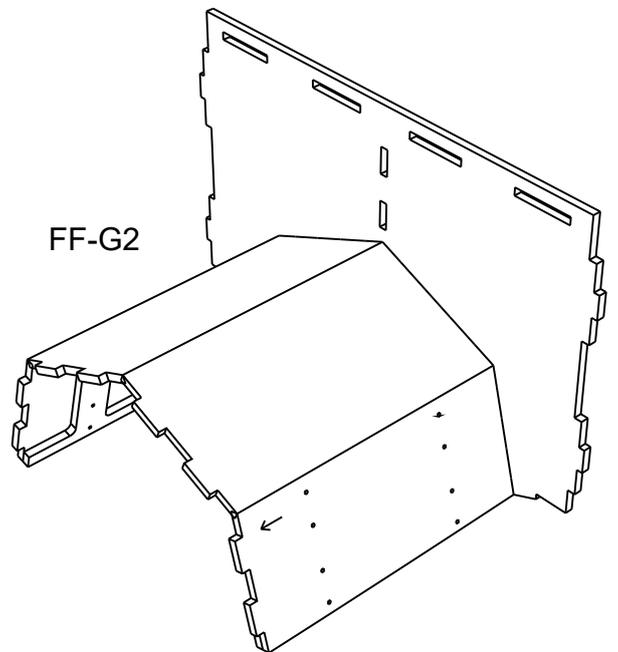
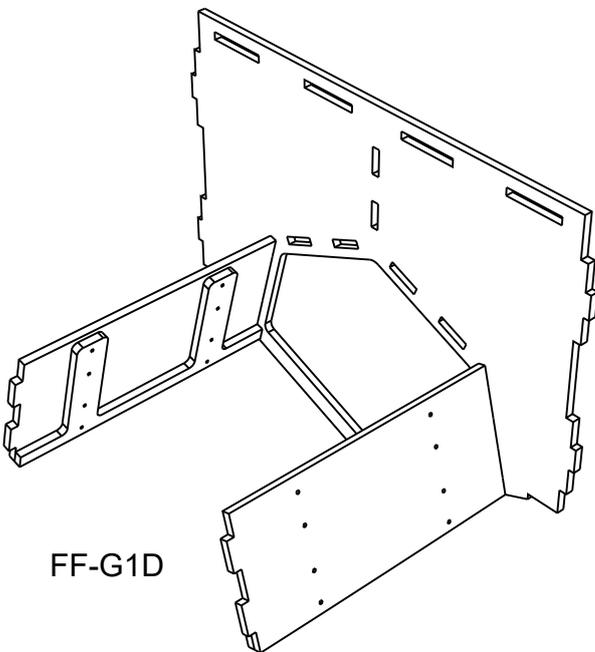
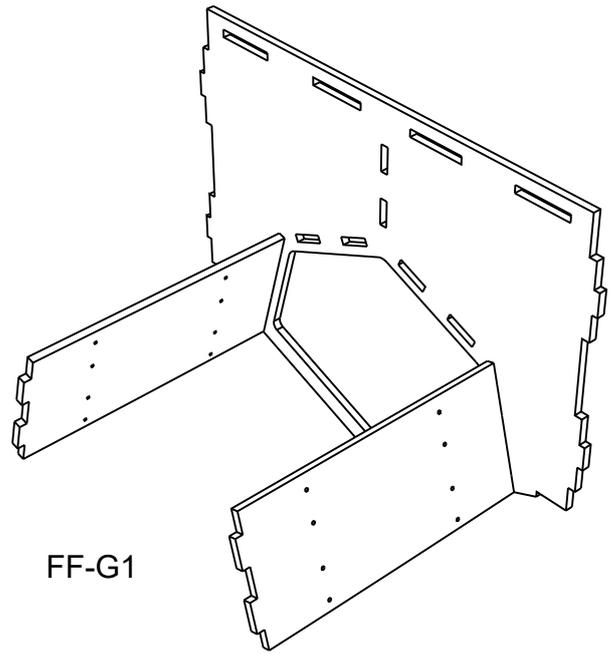
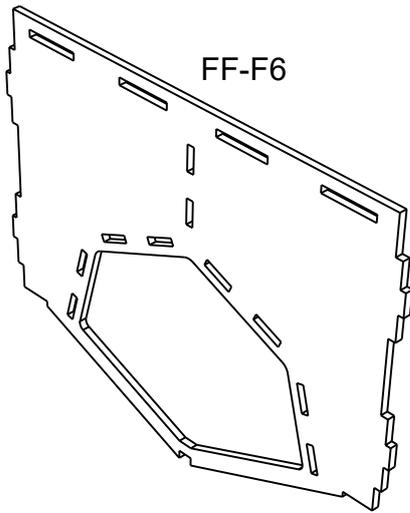


Du-Bro 3/16" gear straps

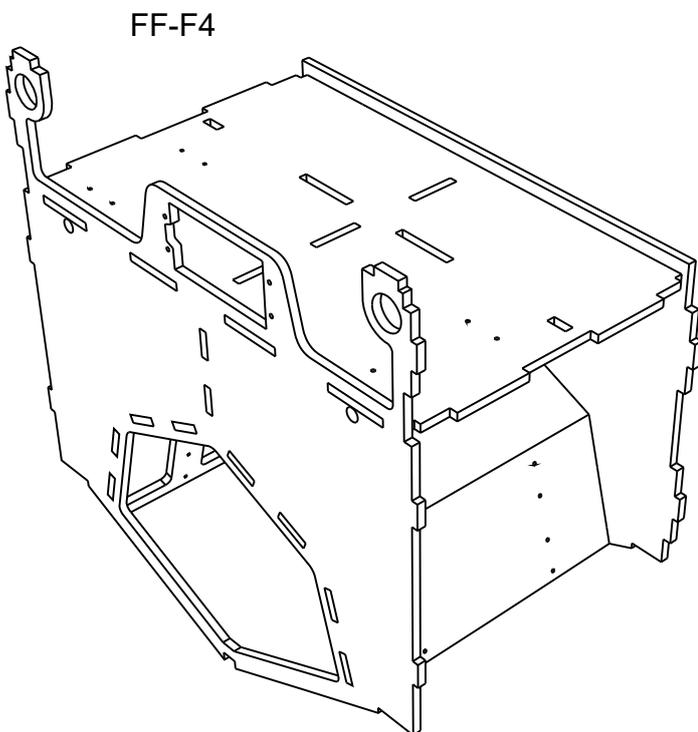
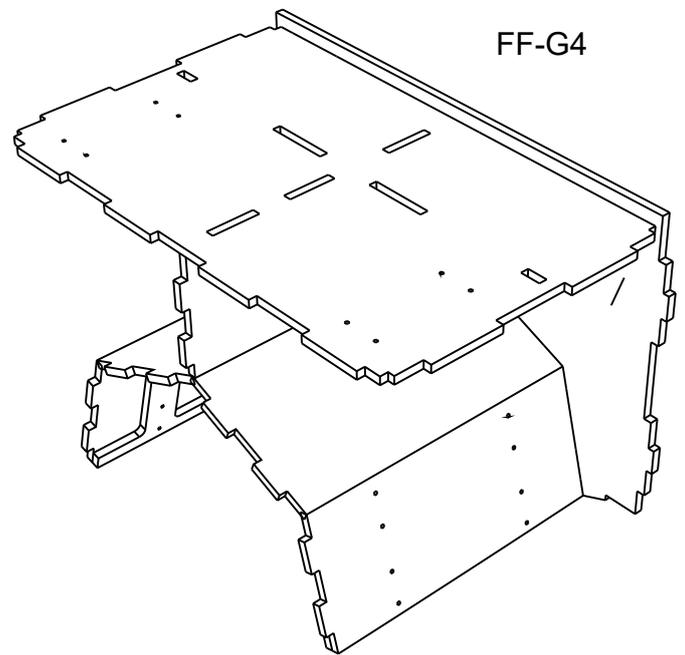
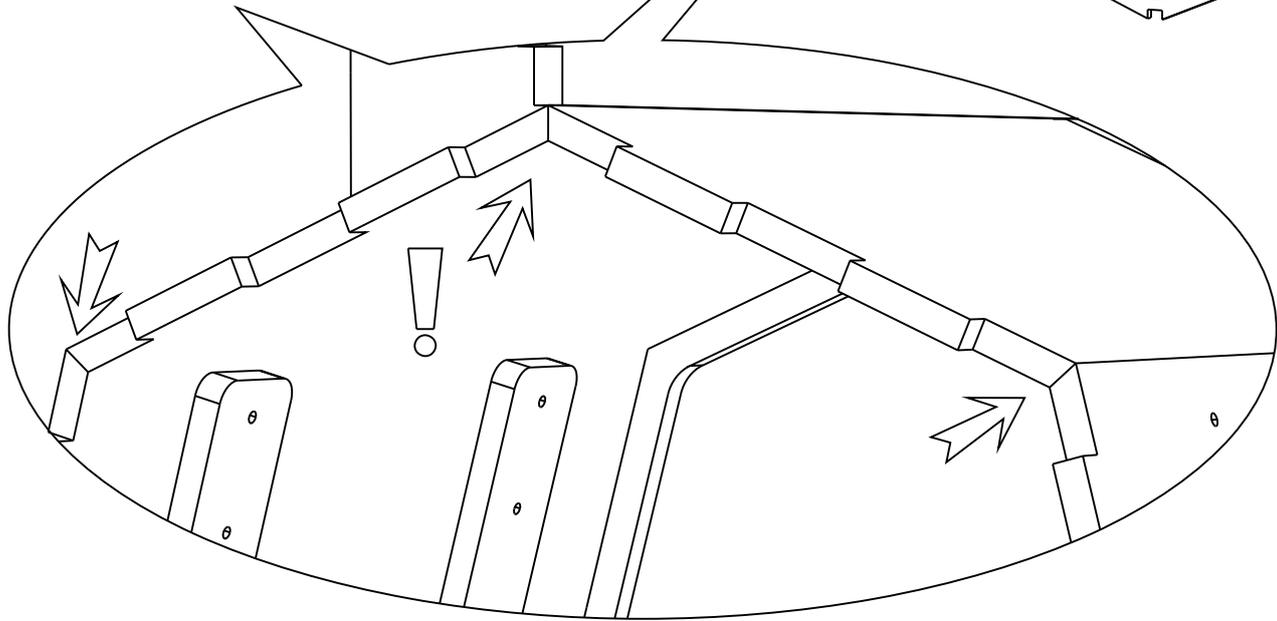
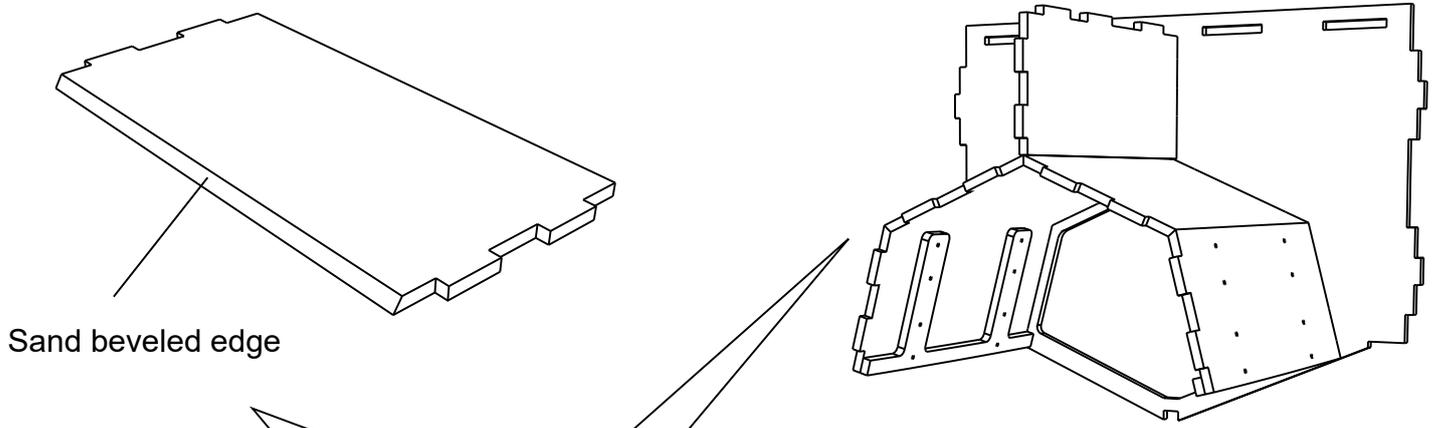
Brass tube 4x3.1mm

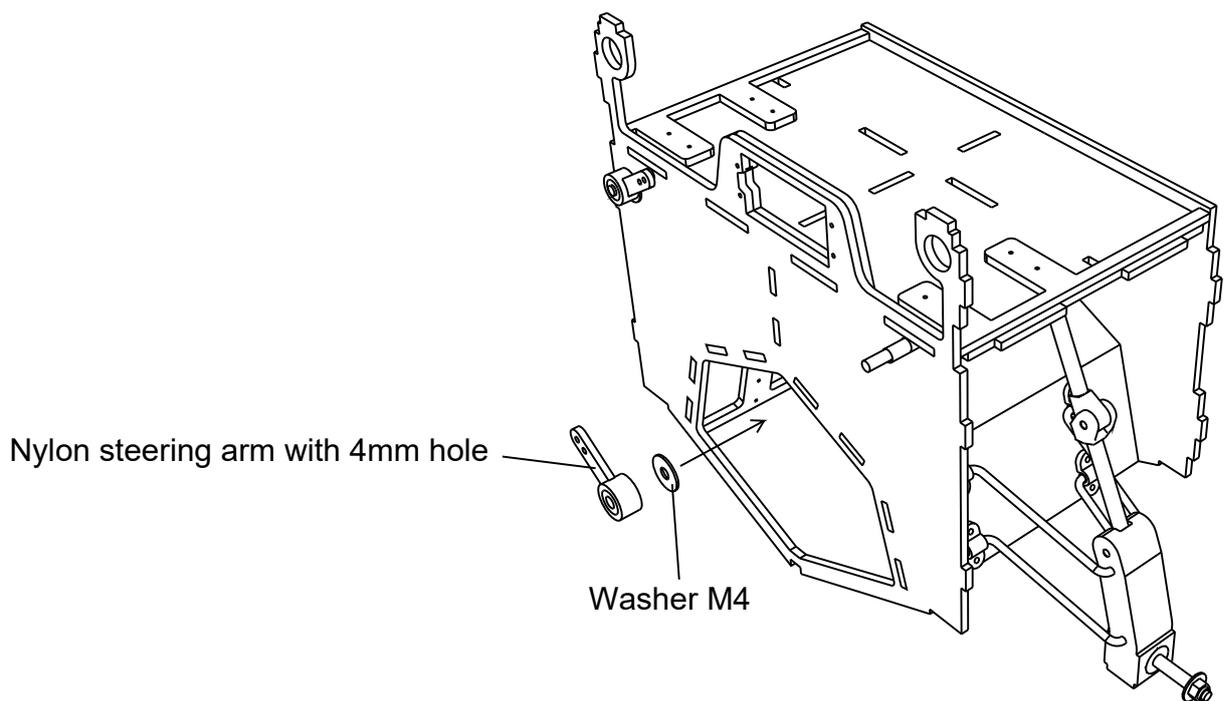
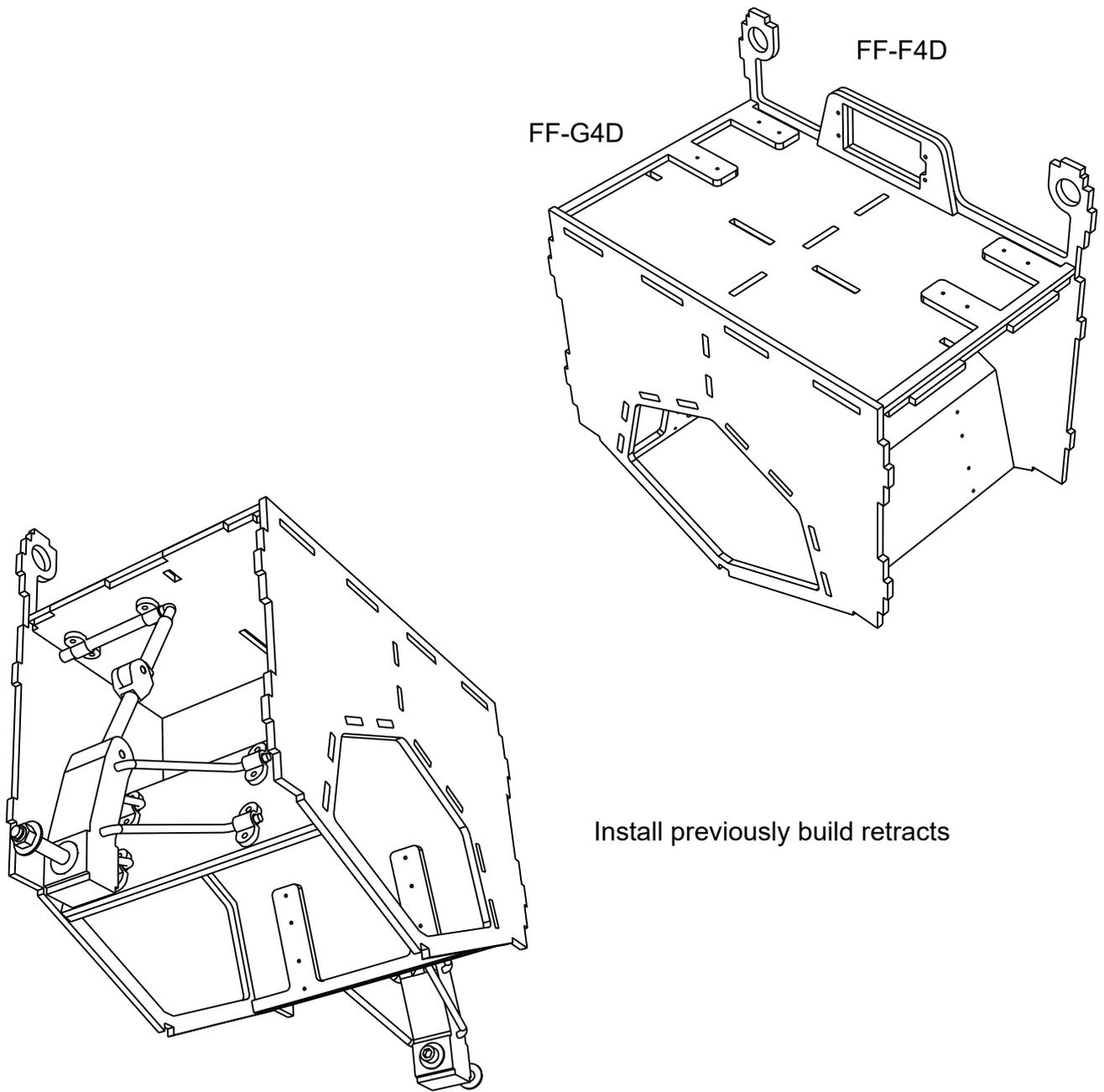


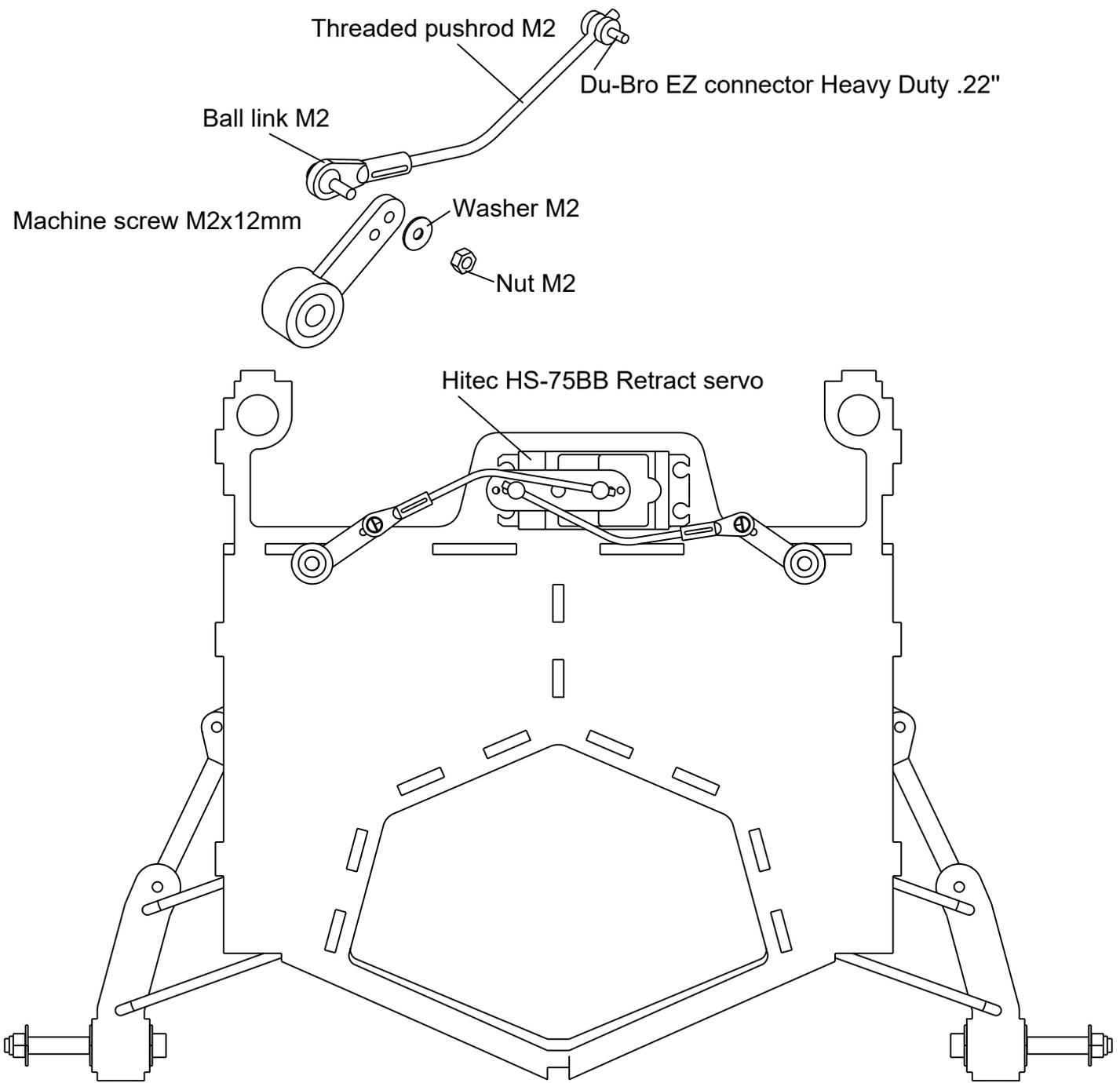
Du-Bro 5/32" gear straps



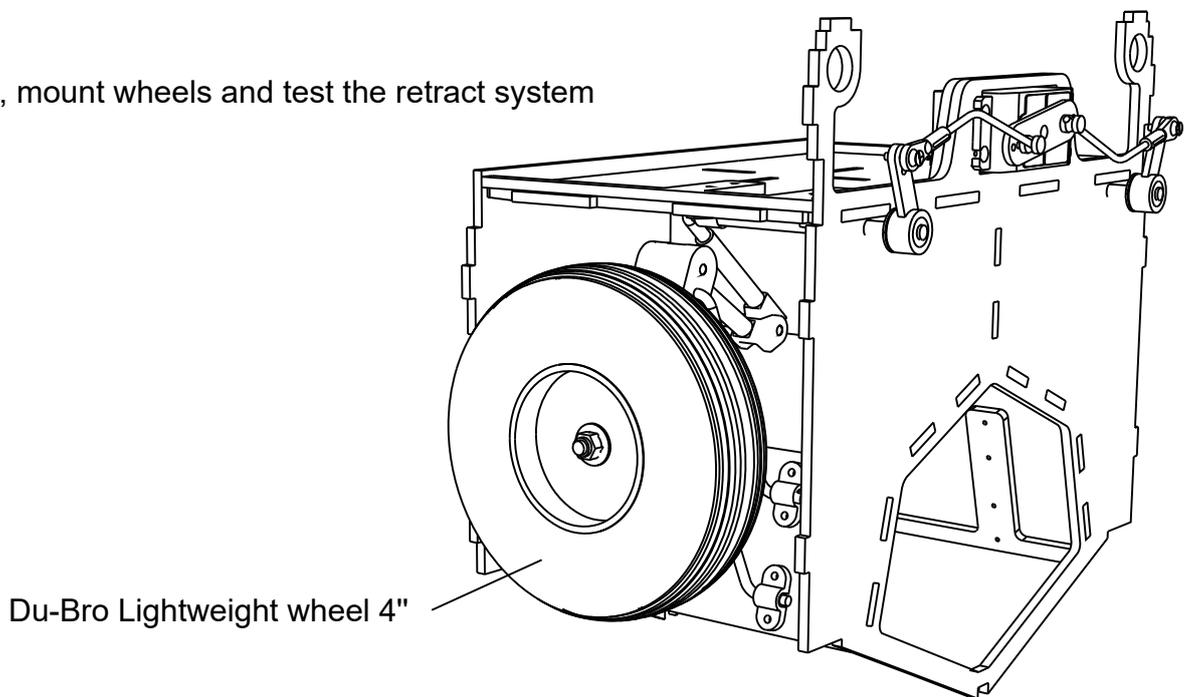
Arrow on part points to nose



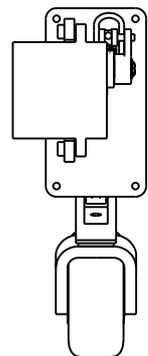
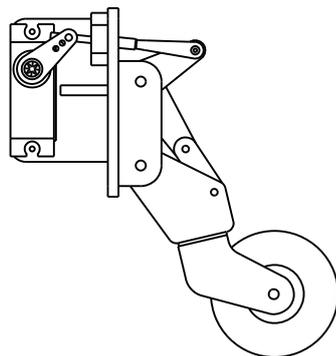
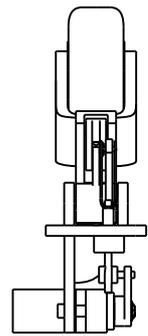
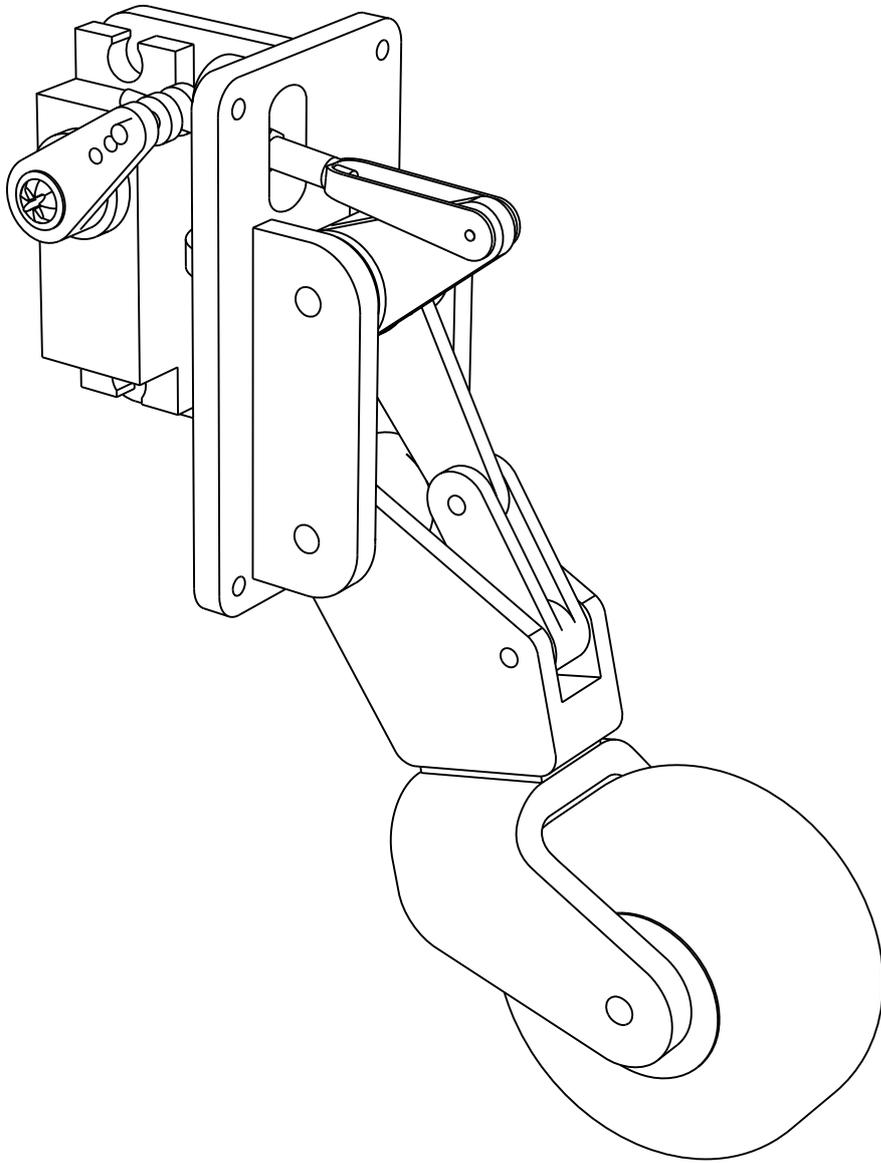




Setup linkage, mount wheels and test the retract system

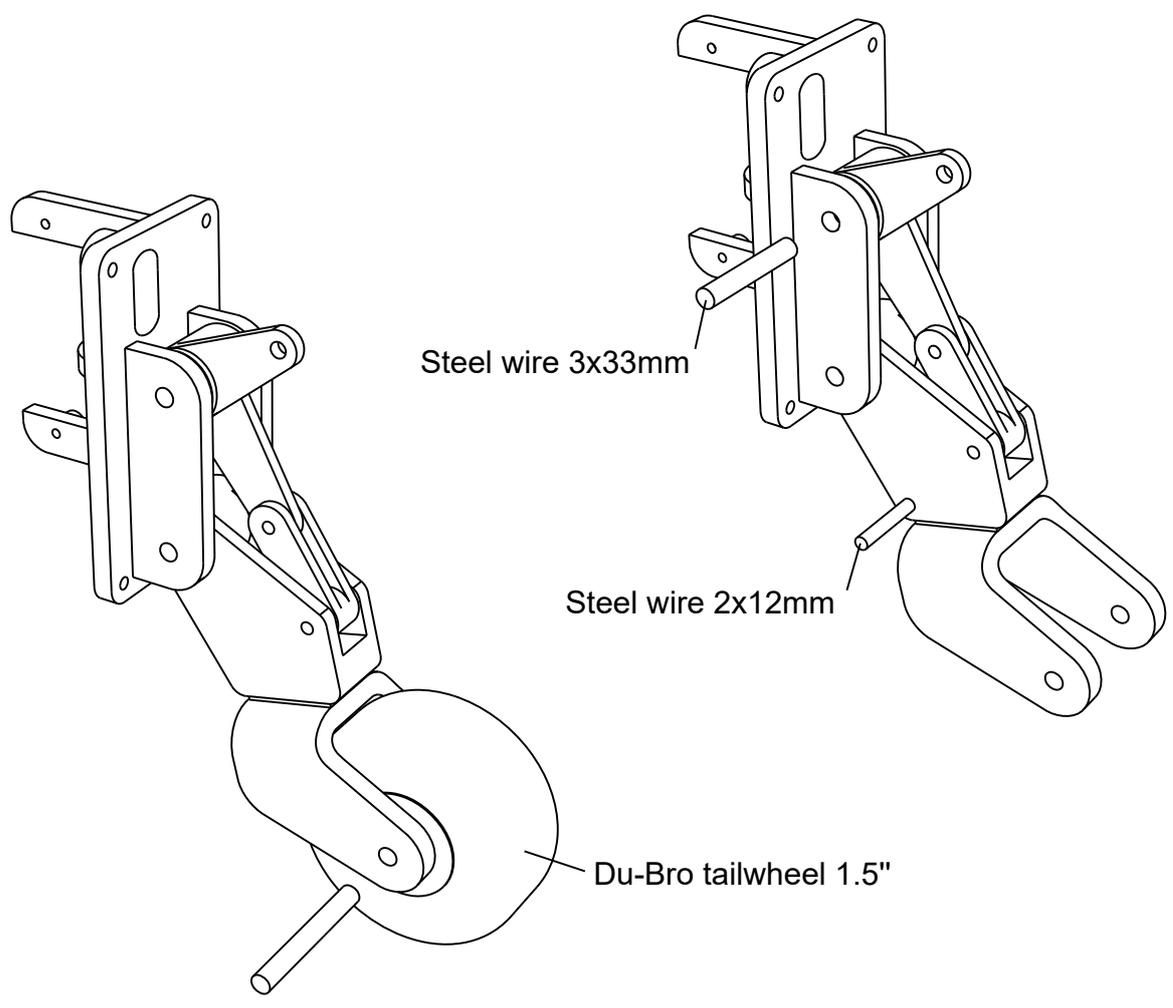
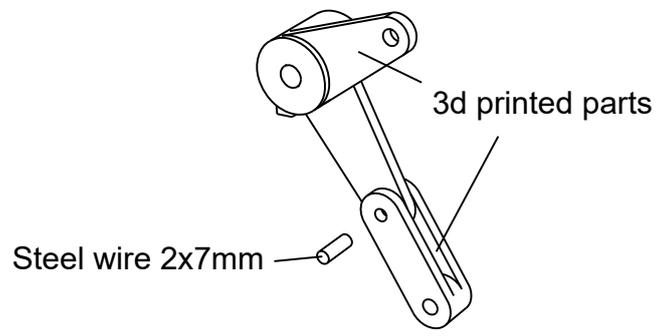
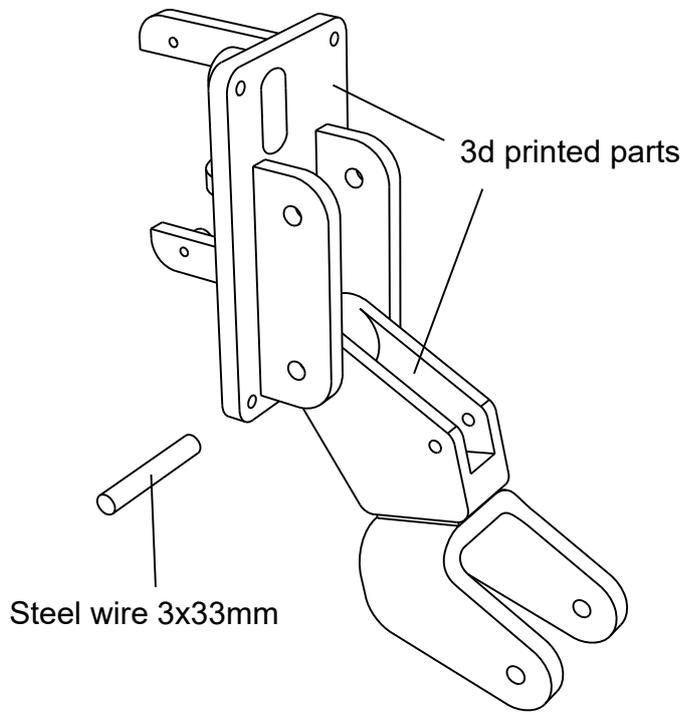


Tail Wheel Unit

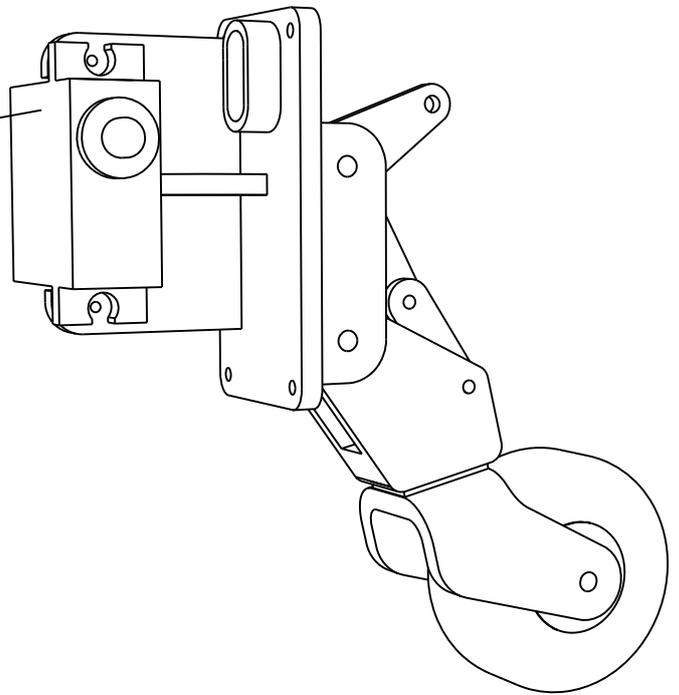


Hardware for this build stage

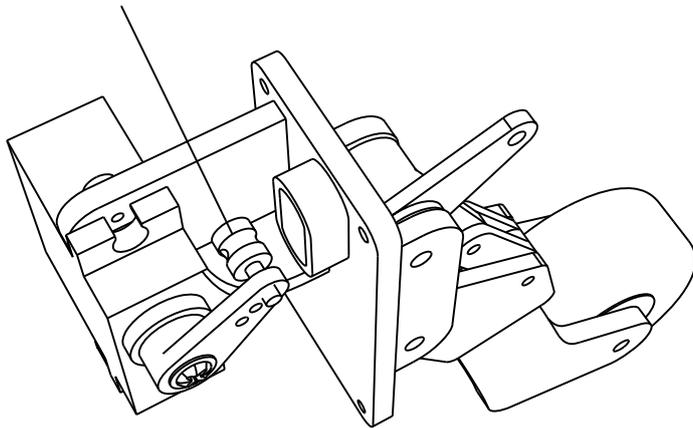
1x	Tailwheel unit		3d printed parts
2x	Hinge pin	3x33mm	Steel wire
1x	Hinge pin	2x12mm	Cut from leftover m2 pushrod
1x	Hinge pin	2x7mm	Cut from leftover m2 pushrod
1x	Axle	3x25mm	3mm steel wire
1x	Pushrod	M2	Cut to size
1x	Pushrod connector		
1x	Metal clewis	M2	
1x	Hitec HS-85BB		Mighty micro servo + mounting hardware
4x	Self tapping screw	2mm	
1x	Du-Bro tailwheel	1.5"	
1x	Balloon		To make the watertight cuff



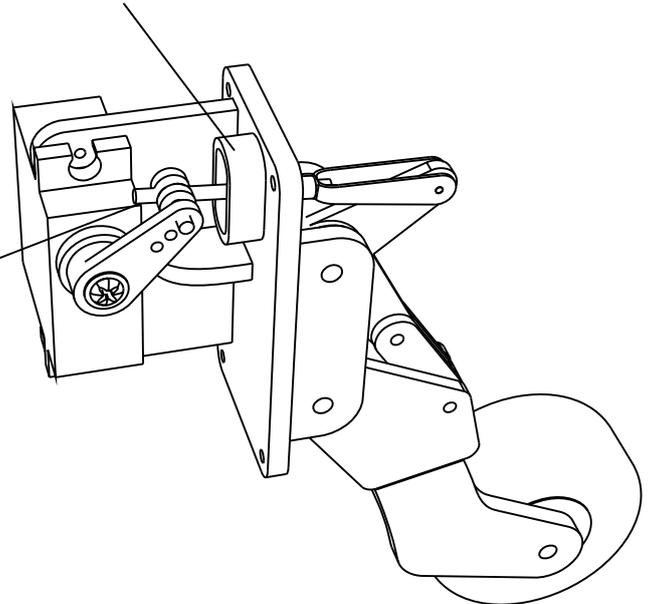
Hitec HS-85BB Servo



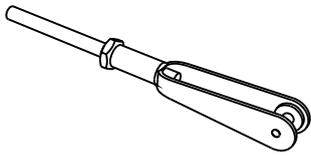
Pushrod connector



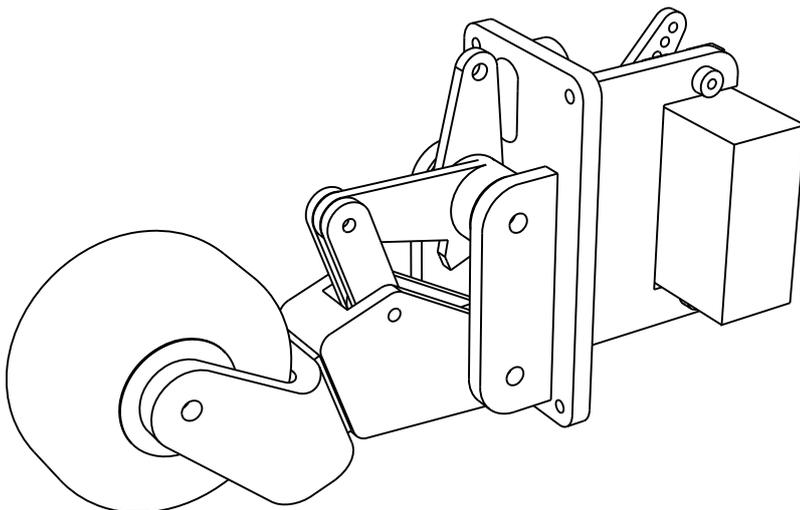
Flange to attach watertight cuff



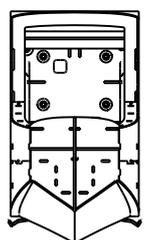
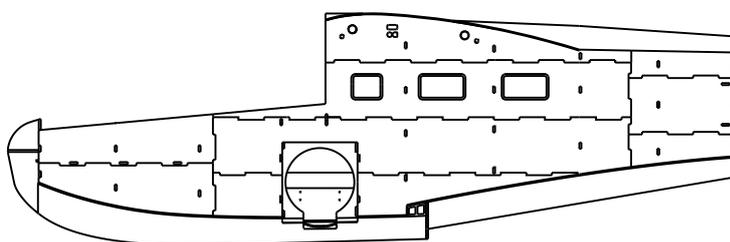
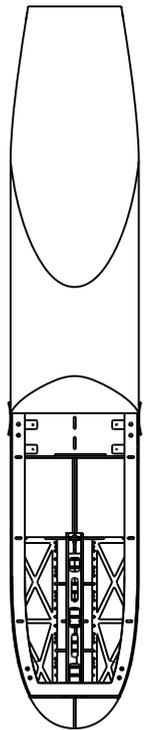
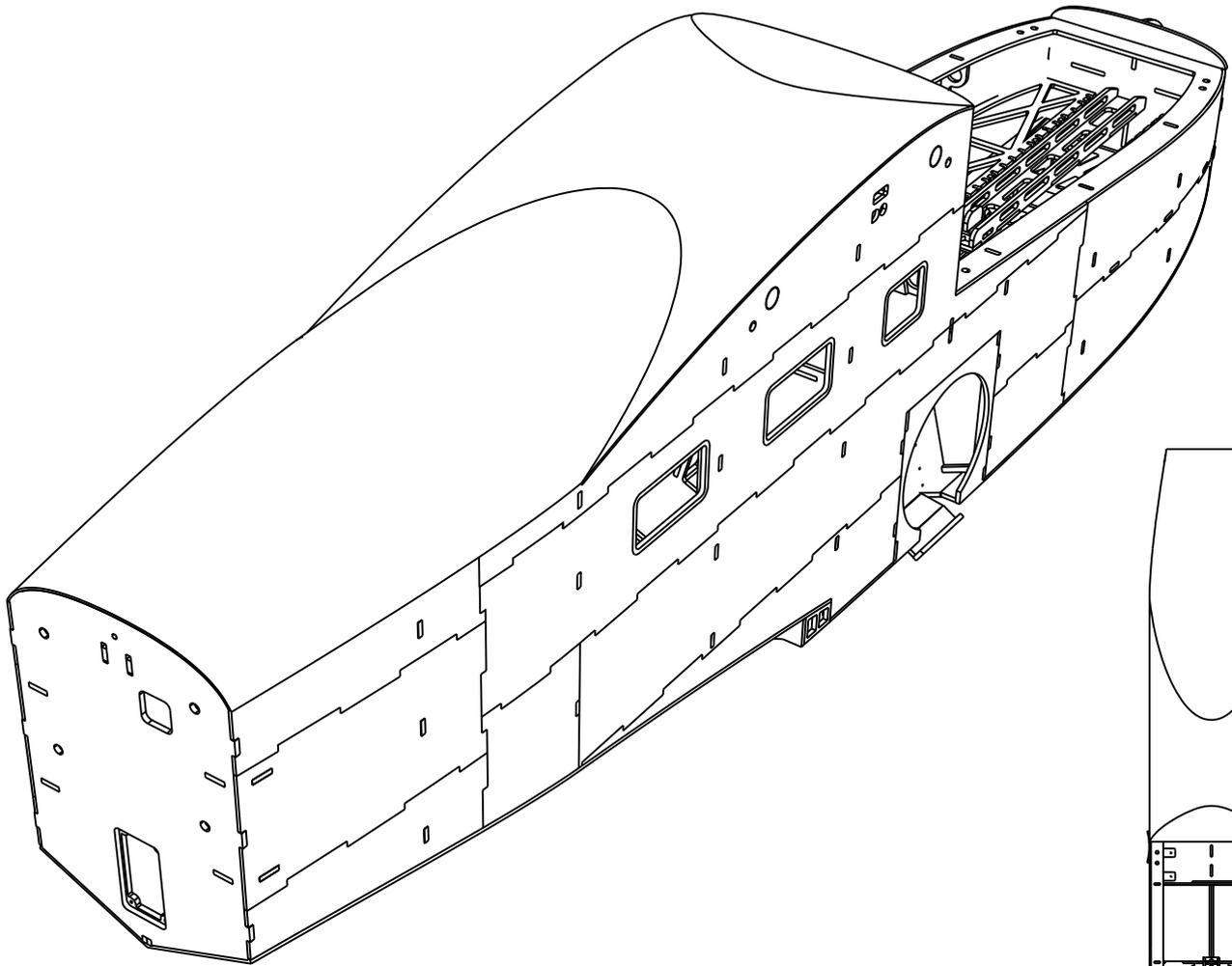
Threaded pushrod M2 & metal clewis



Setup linkage and test operation.
Pushrod may need to be bend to prevent binding to the 3d printed part



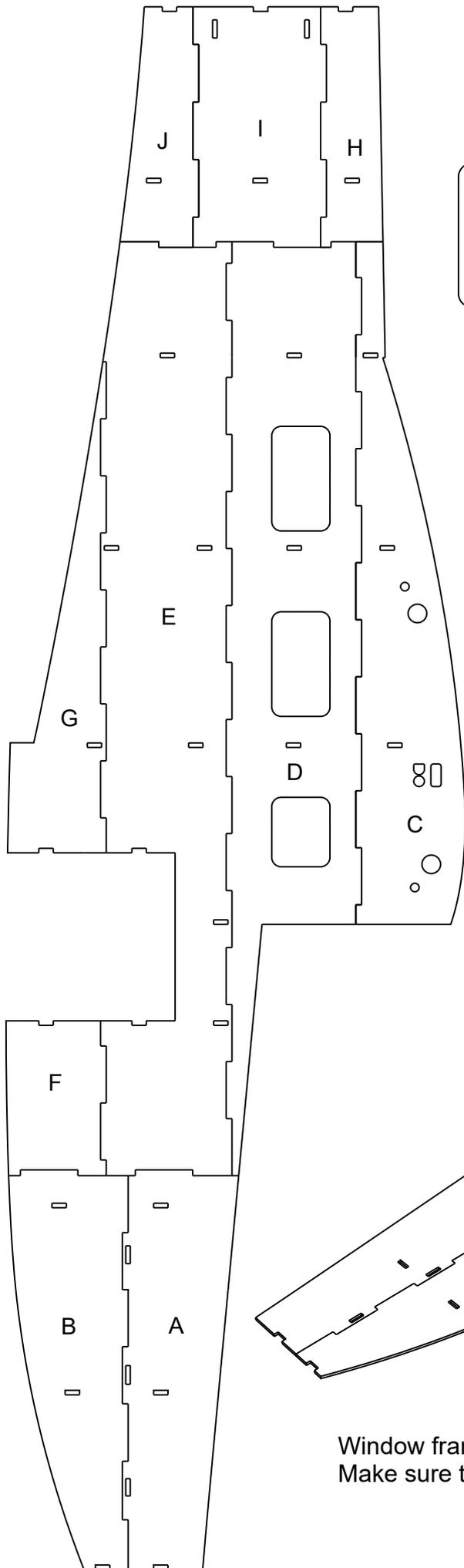
Front Fuselage



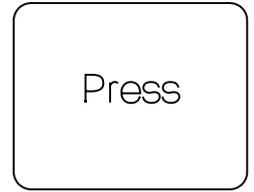
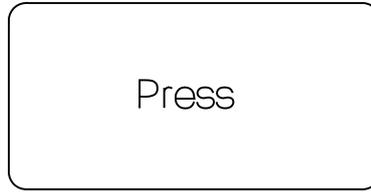
Hardware for this build stage

6x	Round magnet	5x3mm	
2x	Wing joiner tube	13x12.1mm	Cut to from supplied brass tube
4x	Nylon screw	M6	
8x	Nylon nut	M6	
6x	Machine screw	M2	
2x	Spring or rubber band		For closing gear door
2x	Gear door hinge		Make from leftover pushrod & tube
2x	Spring attachment		Make from pushrod inner wire
1x	Canopy lock		
2x	MPX Connector male		
1x	MPX Connector female		
2x	EC3 Connector male		
1x	Lipo connector		
1x	Battery wire	12 AWG	
1x	Battery wire	14 AWG	
--	Servo wiring		See YouTube channel for reference
1x	Receiver		Min. 5 channel
1x	Ubec		Min. 6A
1x	Flight battery		3s5500 to 4s6500 mAh Lipo

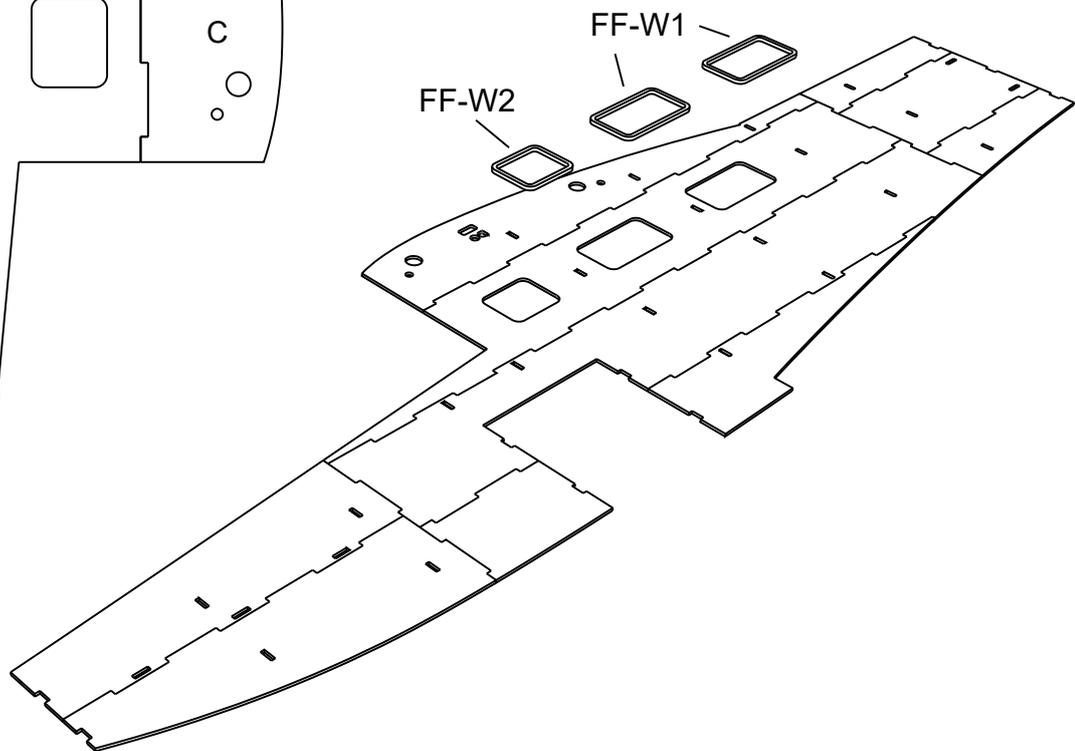
Assemble fuselage sides



Use the window frames and parts labeled 'press' on sheet 23 to form the windows.



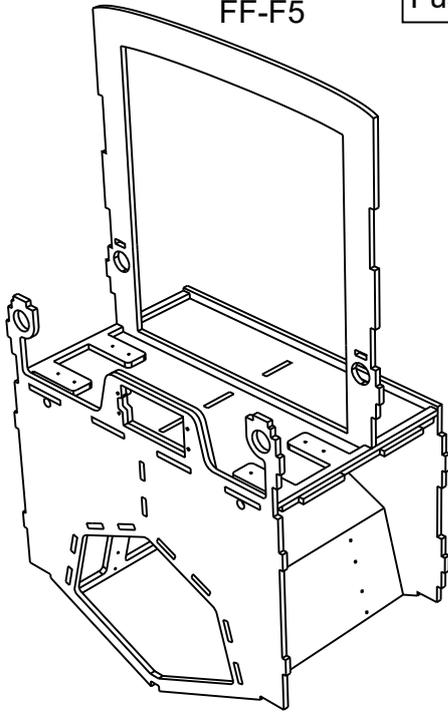
See video on YouTube for tips and tricks



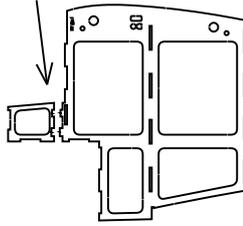
Window frames need to be flush with the outside of the fuselage. Make sure to build one left and one right side!

Fuselage boxframe sub assembly

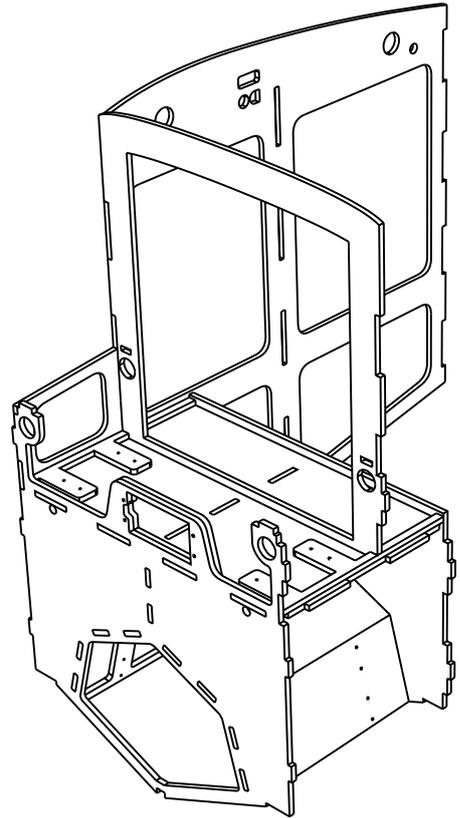
FF-F5



Assemble FF-BX1

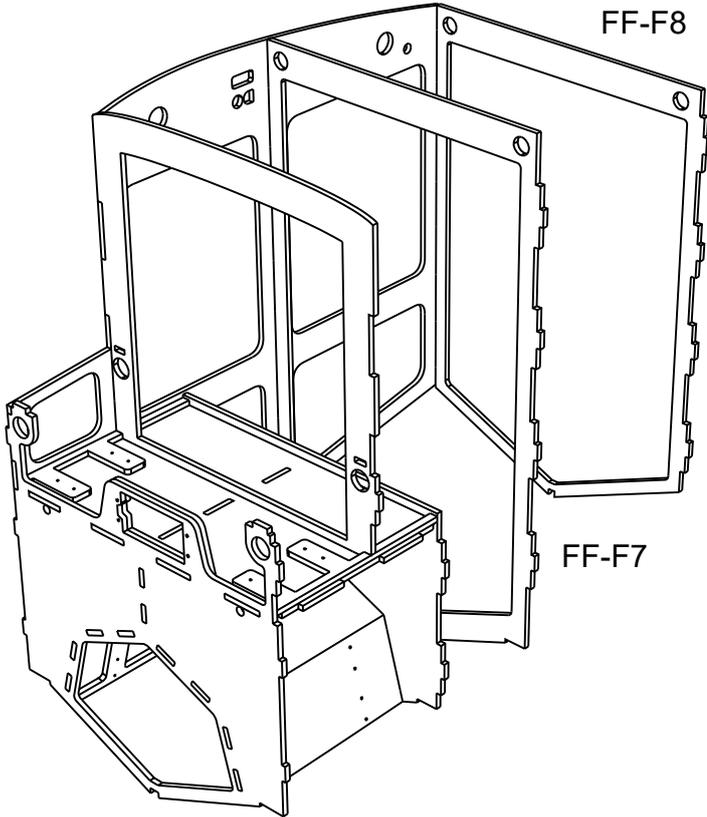


FF-BX1



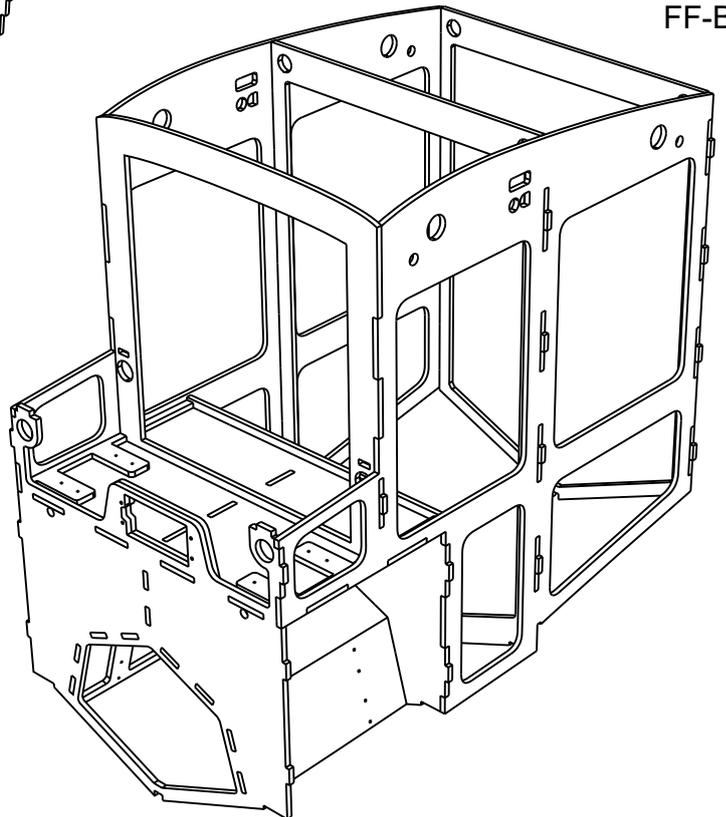
Previously build landing gear box

FF-F8

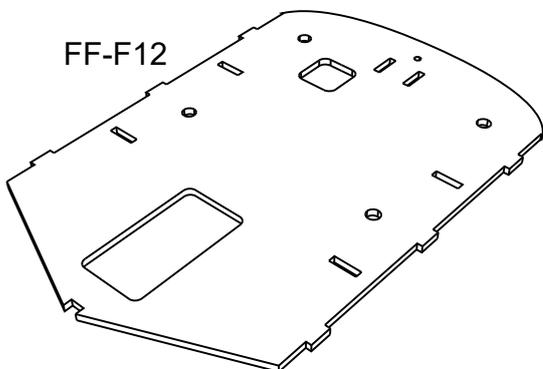
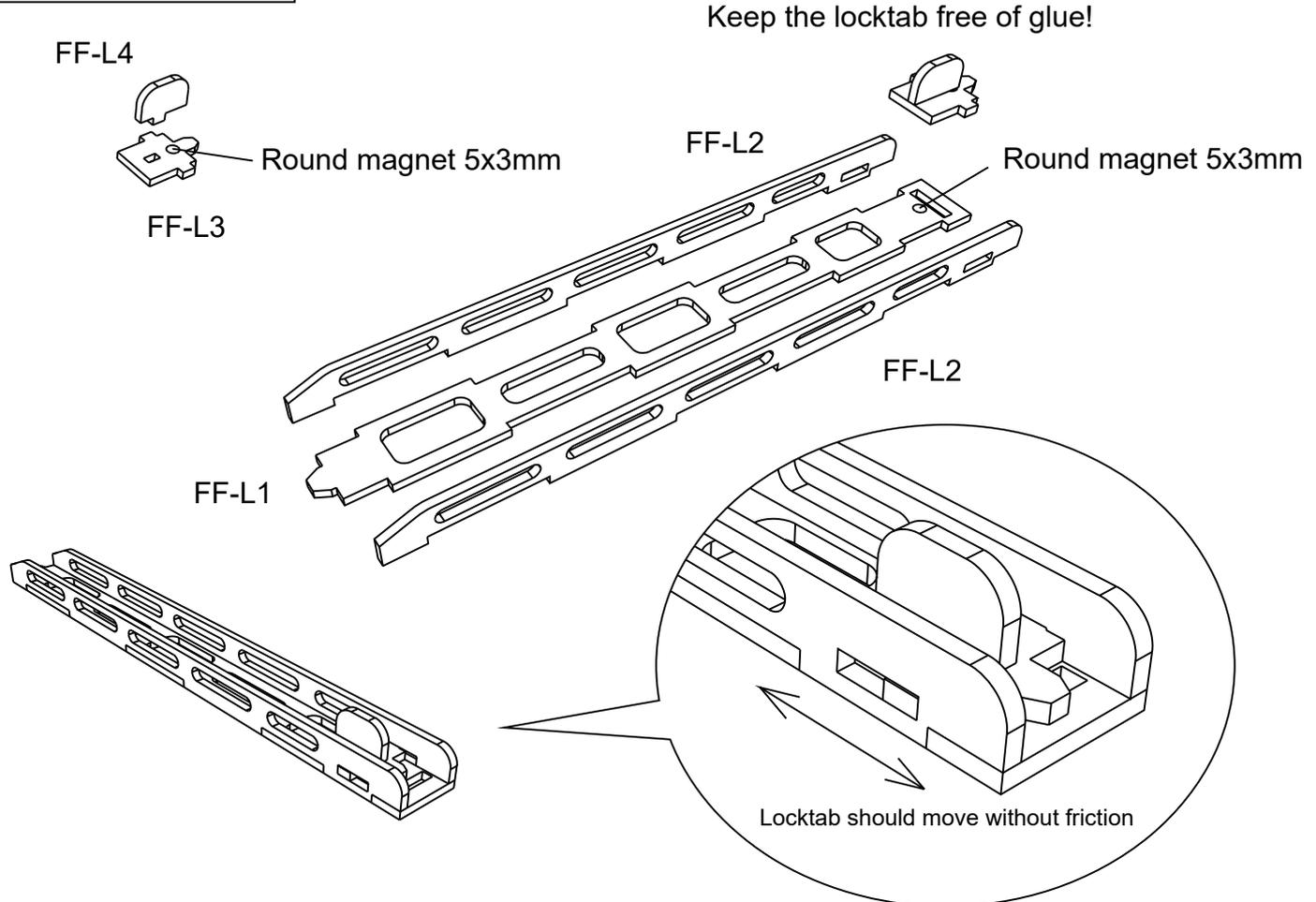


FF-F7

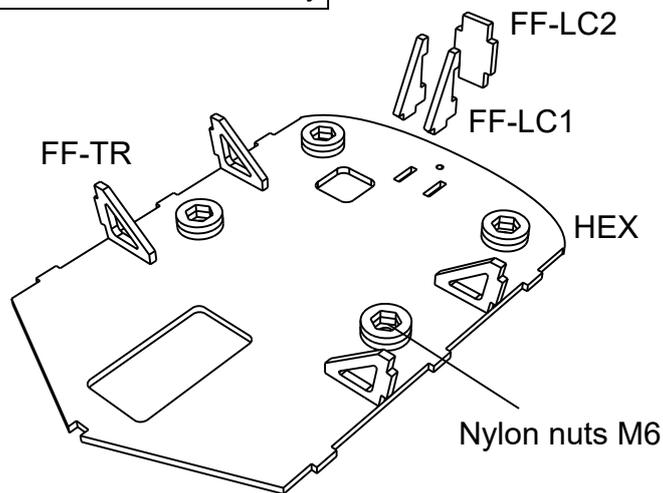
FF-BX1



Battery lock sub assembly

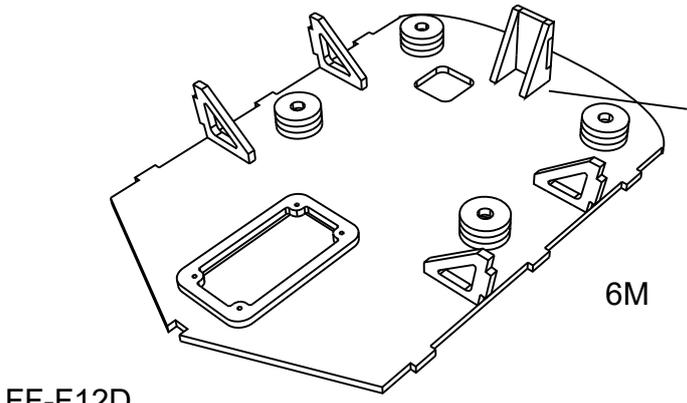


Split fuse former sub assembly



Canopylock determines position of support frame

Glue canopy lock in place



Use tailwheel unit to position FF-F12D