2 - Top Frame Assembly

In this part of our assembly, we shall be putting together the top frame portion of the Ilios machine. this is the part on which the rest of the components sit, sot it is important we do this right and won't have the hustle of redoing it once we realize that something was done incorrectly. The main feature that shall help you in putting everything together, is the position of the holes on each part. Note the holes on the images and make sure yours face the same way.

Step 1

1 x Top Frame Back

1 x Top Frame Front

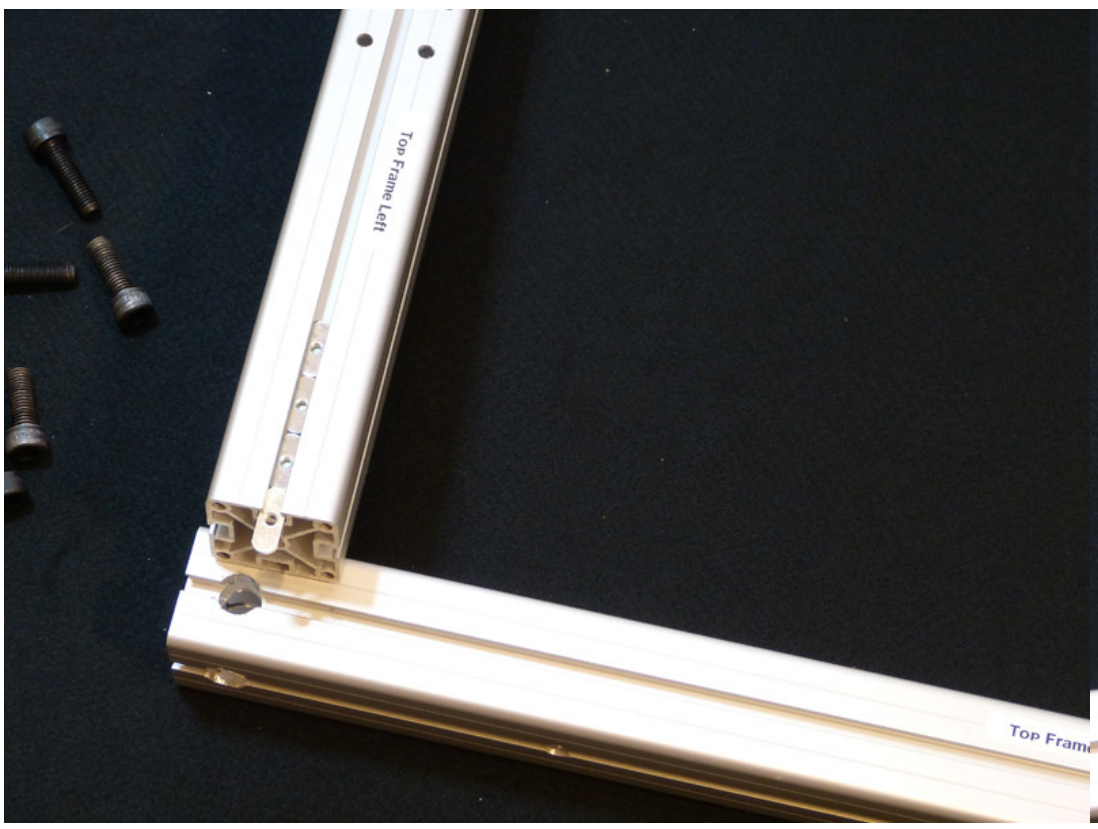
1 x Top Frame Right

1 x Top Frame Left

1 x Nuts & Bolts Bag

Make sure that you have everything, as shown on the image above. You shall need these items to go through this part of the assembly, so it is important you find and place in front of you the above parts and tools.

Step 2

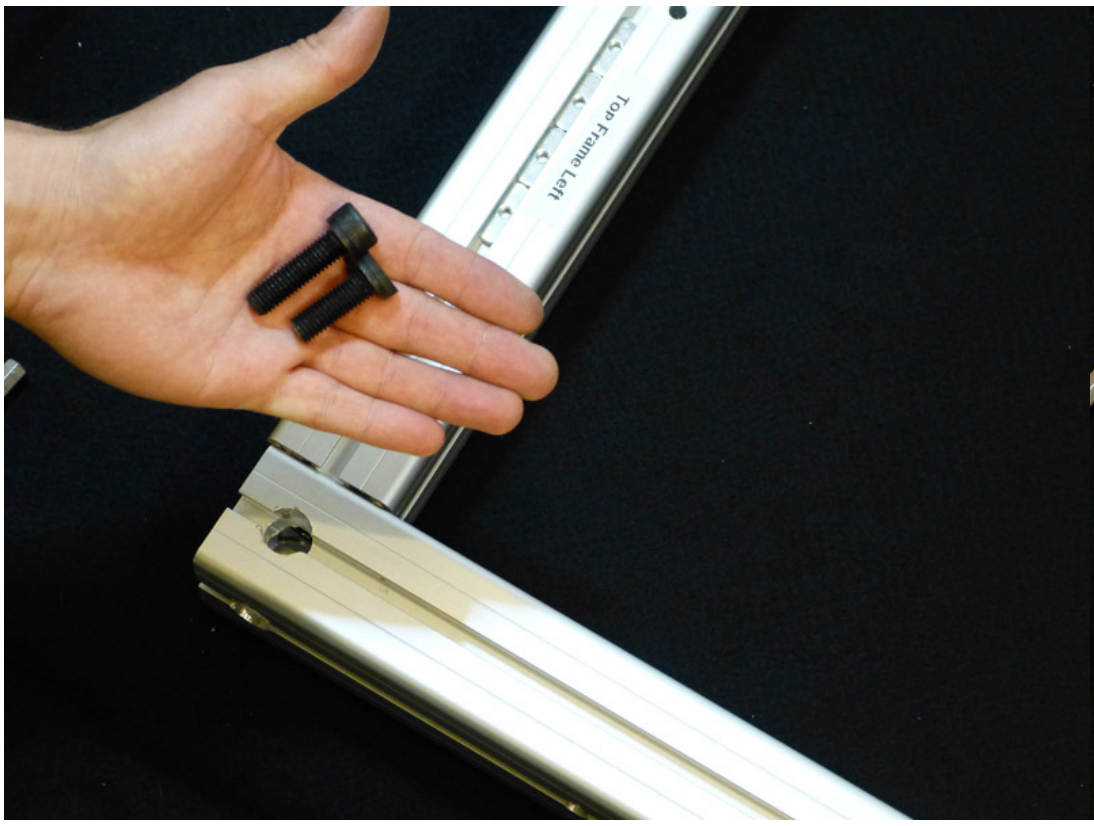


Before we begin bolting everything together, we need to add the four (4) Oval Slide nuts to the slots as shown. These have to go to the Left and Right parts of the frame (on the top slot). These nuts have a 5mm thread (important to note and not confuse with the 6mm thread) and shall hold the motion framing later on.

Add the same 4 nuts, included in the associated bag to the right side as well. Note the labels that are attached to each part. It is important to add these nuts now, since later on, these parts shall be bolted together and we won't be able to slide them in.

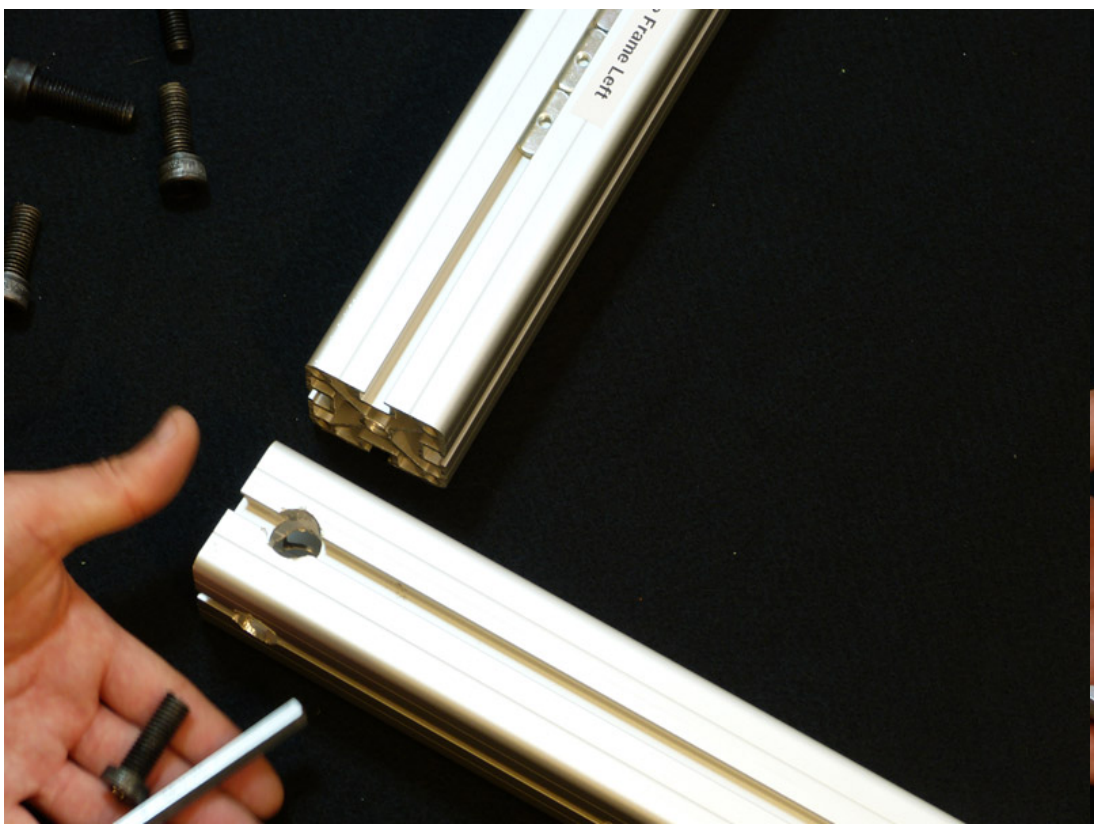
Step 3

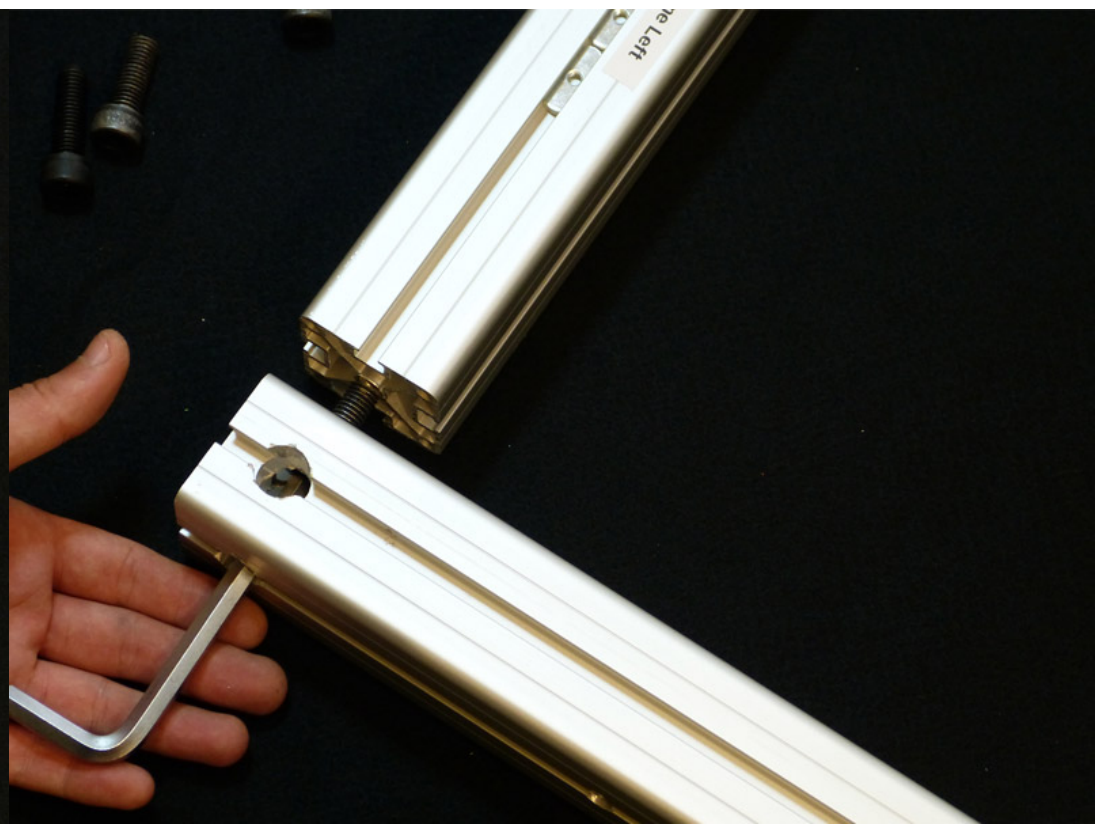
2 - Top Frame Assembly



In the bag with the nuts and bolts for this part of the assembly, you shall find two types of the same 10mm bolt. There should be a normal bolt and one with a shorter head and length. Each corner requires 1 of each type.

Note the orientation of each bolt and which one goes where. The normal one should be facing downwards and eventually shall connect the feet to this part of the frame. The shorter bolt needs to go first, to connect each side of this frame.

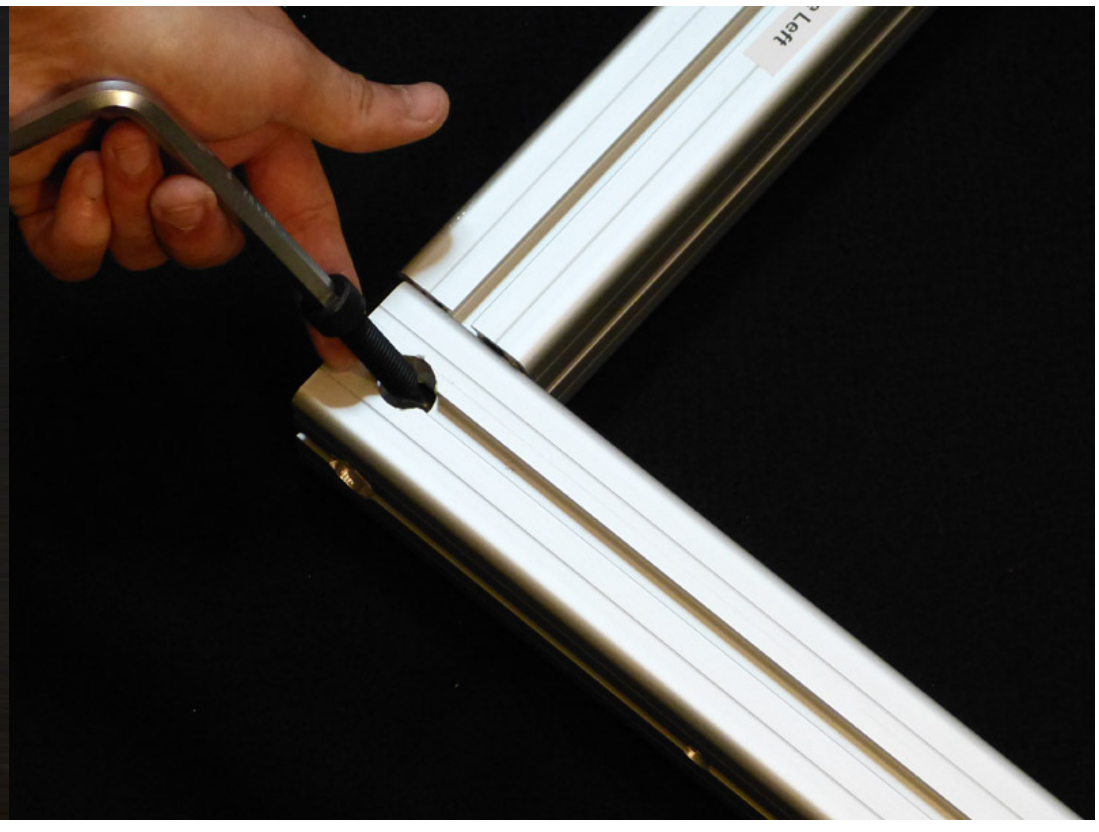




First we take the shorter bolts, to connect each side of the Top Frame. It is important that this bolt goes in first.

Join the Left and Front sides first and then the Back and Right. These bolts might take some effort to get tighten but make sure they are in all the way, before going any further.

2 - Top Frame Assembly



The finished frame should look like the picture above. Once again, make sure that Left is on your Left and Back is in the Back since this shall help you later on with the rest of the assembly.

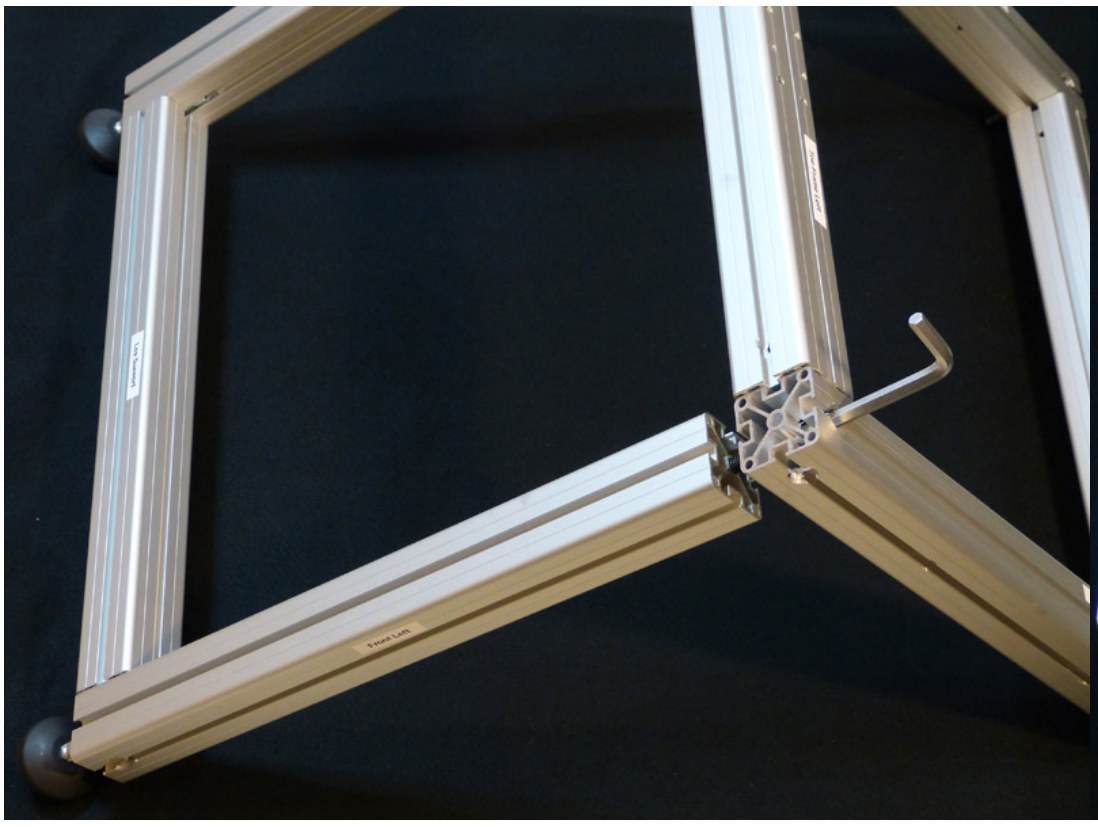
Take the Longer "normal" bolts and guide them through the part. Make sure these bolts go all the way in, since it shall make your life easier later on when assembling the feet of the machine and this frame portion.

Step 4

Before continuing, make sure all four bolts for the feet, are all the way through and that the frame it self is tight and secure and is being held firmly by the shorter bolts, inserted earlier.

Begin with the Left Feet assembly and align as well as tighten the bolts, while holding the assemblies as shown in the image. They should stay relatively steady once you center the bolts and start threading them in.

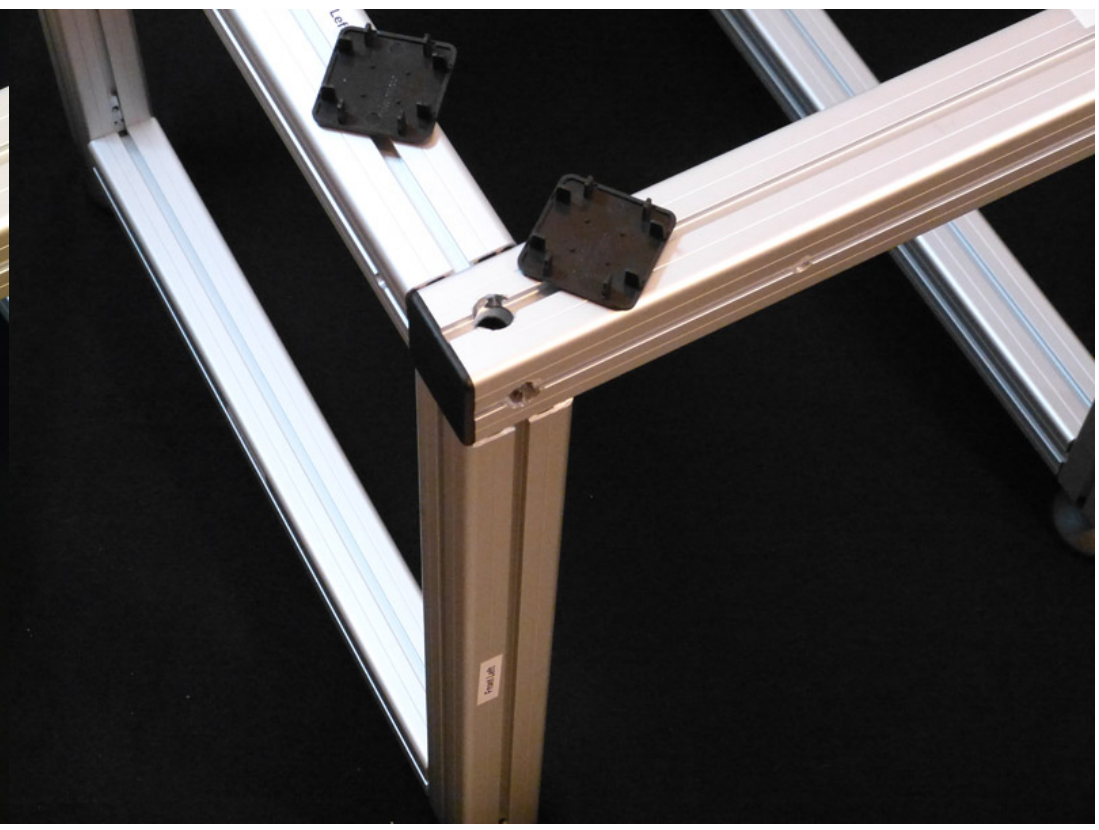
2 - Top Frame Assembly



Use the longer part of the Allen Key to make your life easier. Set included with the kit was specifically selected with extra long ends for this task and the keys are not cheap and should fit tightly within each bolt.

Once this part of the assembly is complete, go through all the bolts and tighten them once again (not too tight though, not to deform the parts them selves or strip the threads) so that this part of the assembly is firm and ready to hold the rest of the machine. Note again the orientation of all parts ans especially the holes, as shown in the picture. It is important that the holes orientation is exactly as in the picture above.

Step 5



In the bag you shall find plastic caps, which go on each side of the frame. They are decorative but also help protect the internals of the joints, plus it looks much better with them :) You shall need 4 caps for this part of the assembly.

Place each cap as shown on the picture above. They are not very flexible, so make sure to tap them with a mallet or your hand to completely become flush with the assembly.

Congrats! This is starting to look more and more like a machine. But it also looks like a nice table or a chair :) No worries however, it shall begin to look more like a 3D printer once we start adding more serious components on it.