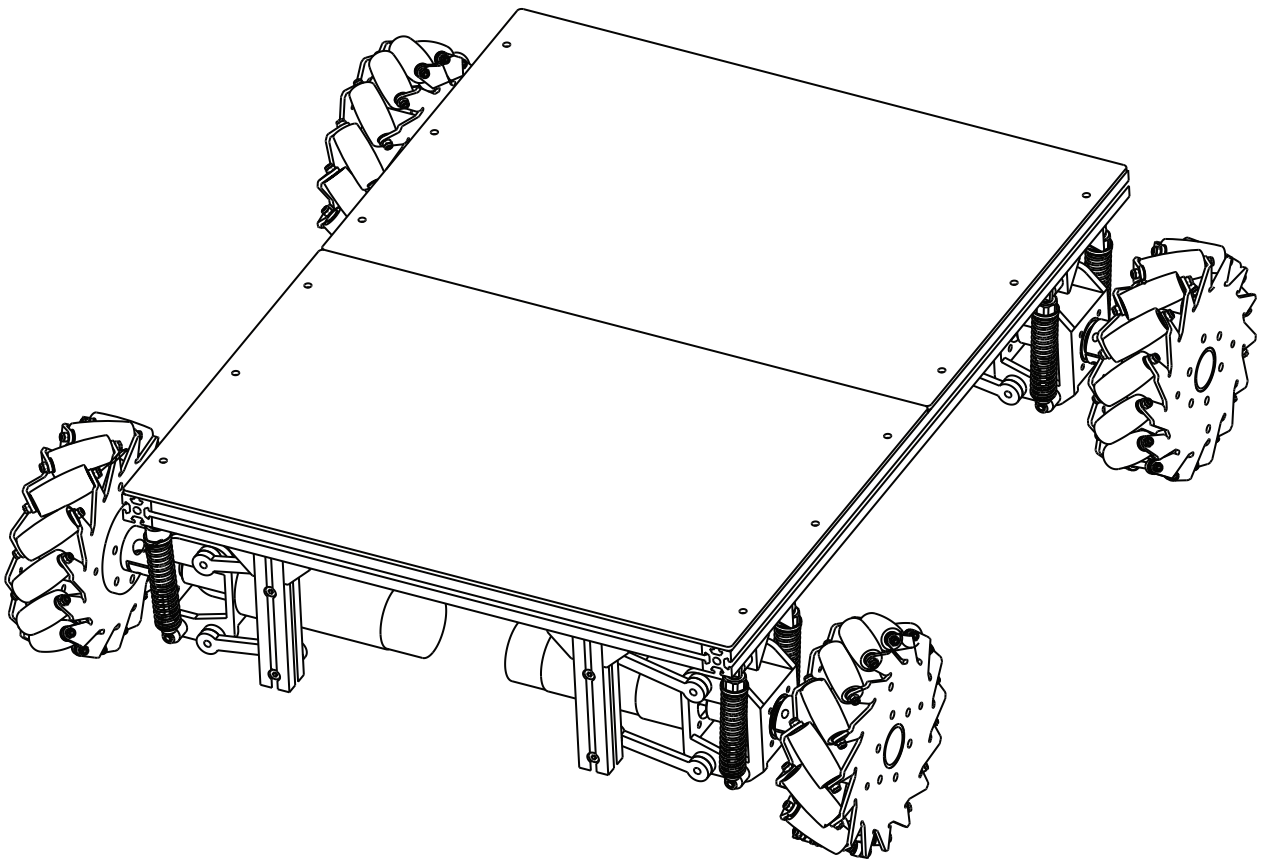
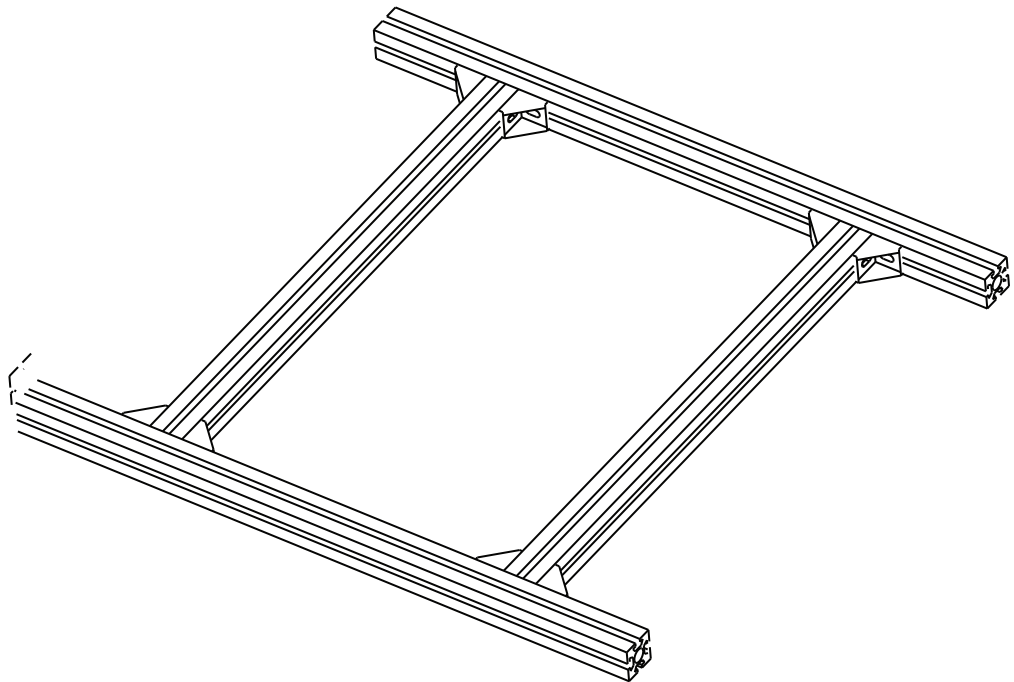
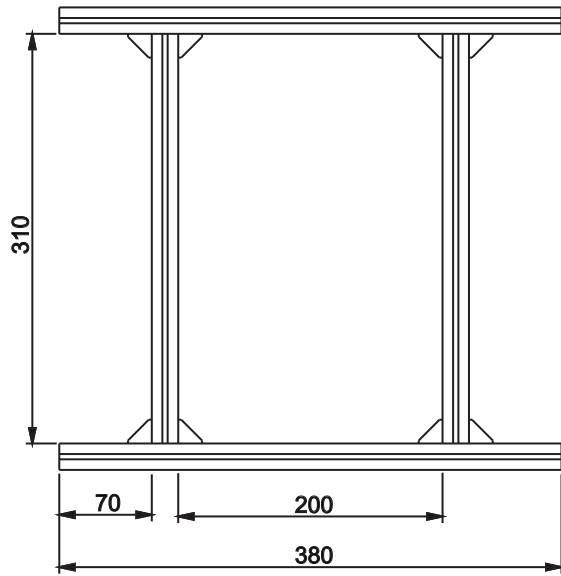


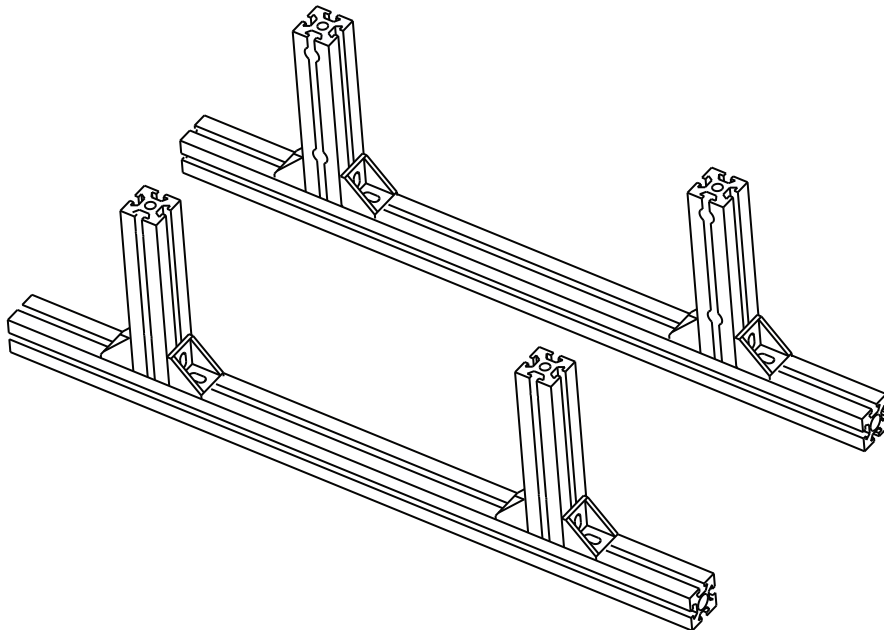
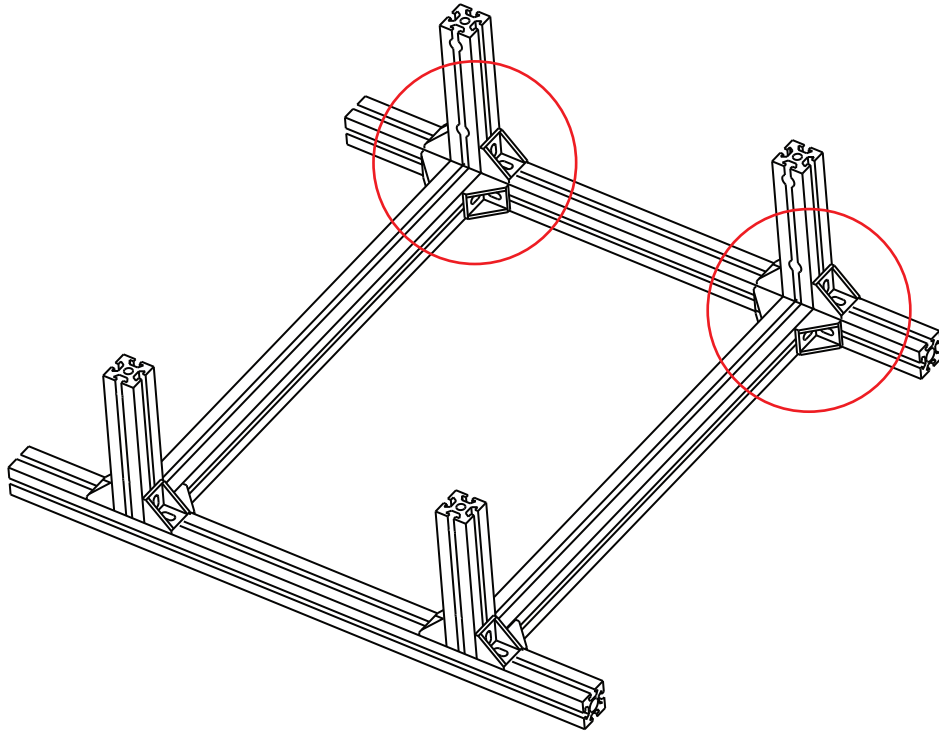
EasyMech Independent Suspension Shock Absorber Chassis Assembly Guide



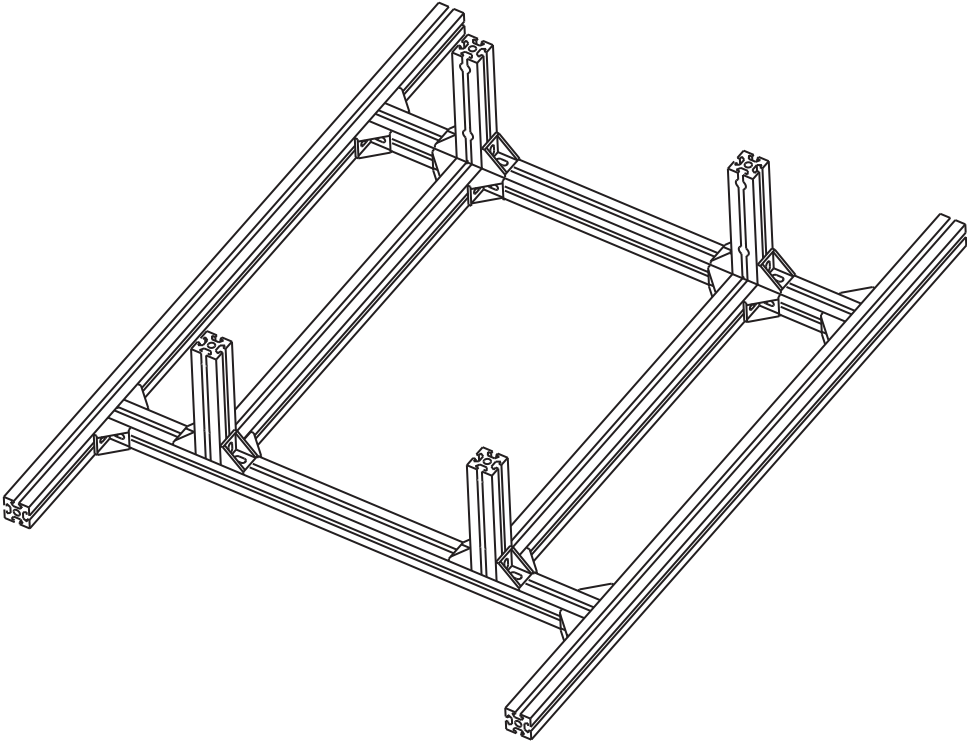
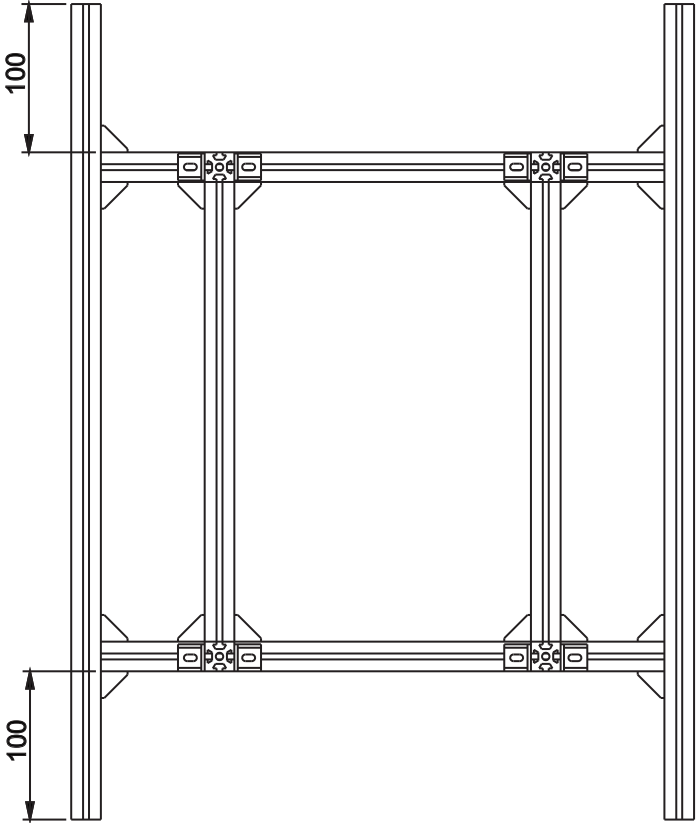
1. Firstly, we will assemble the Chassis base frame. For that we will required 20x20 Aluminium Extrusion of length 100mm, 310mm, 380mm & 550mm. Assemble the chassis base frame with the help of Corner bracket, T nut & Button headed screws as per dimensions. (Refer fig.)



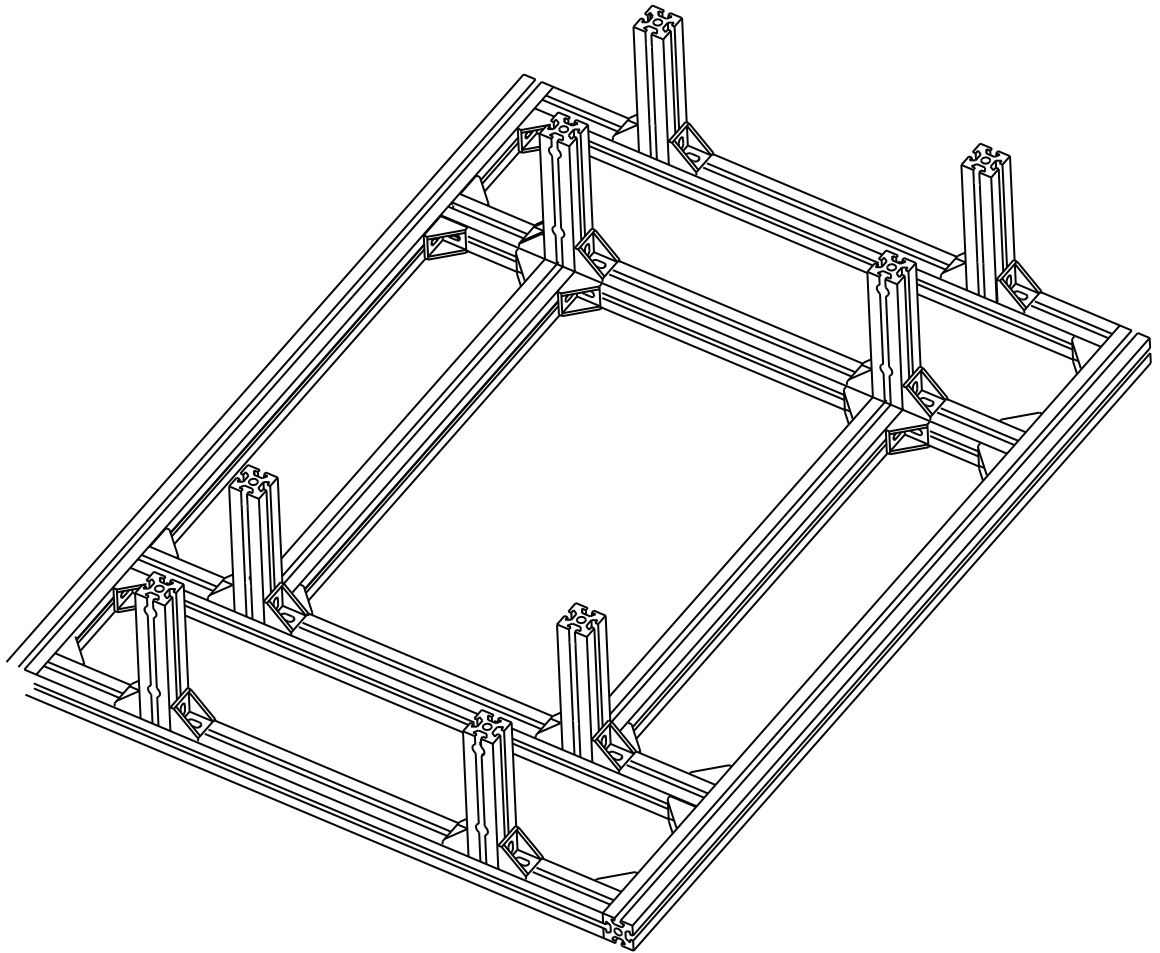
2. Now, fix 4 pieces of 100mm length 20X20 extrusion as shown in below fig. Also fix it separately on 380mm extrusion as shown in image, we will use it after some time. Make sure orientation of the extrusion while fixing the extrusion.



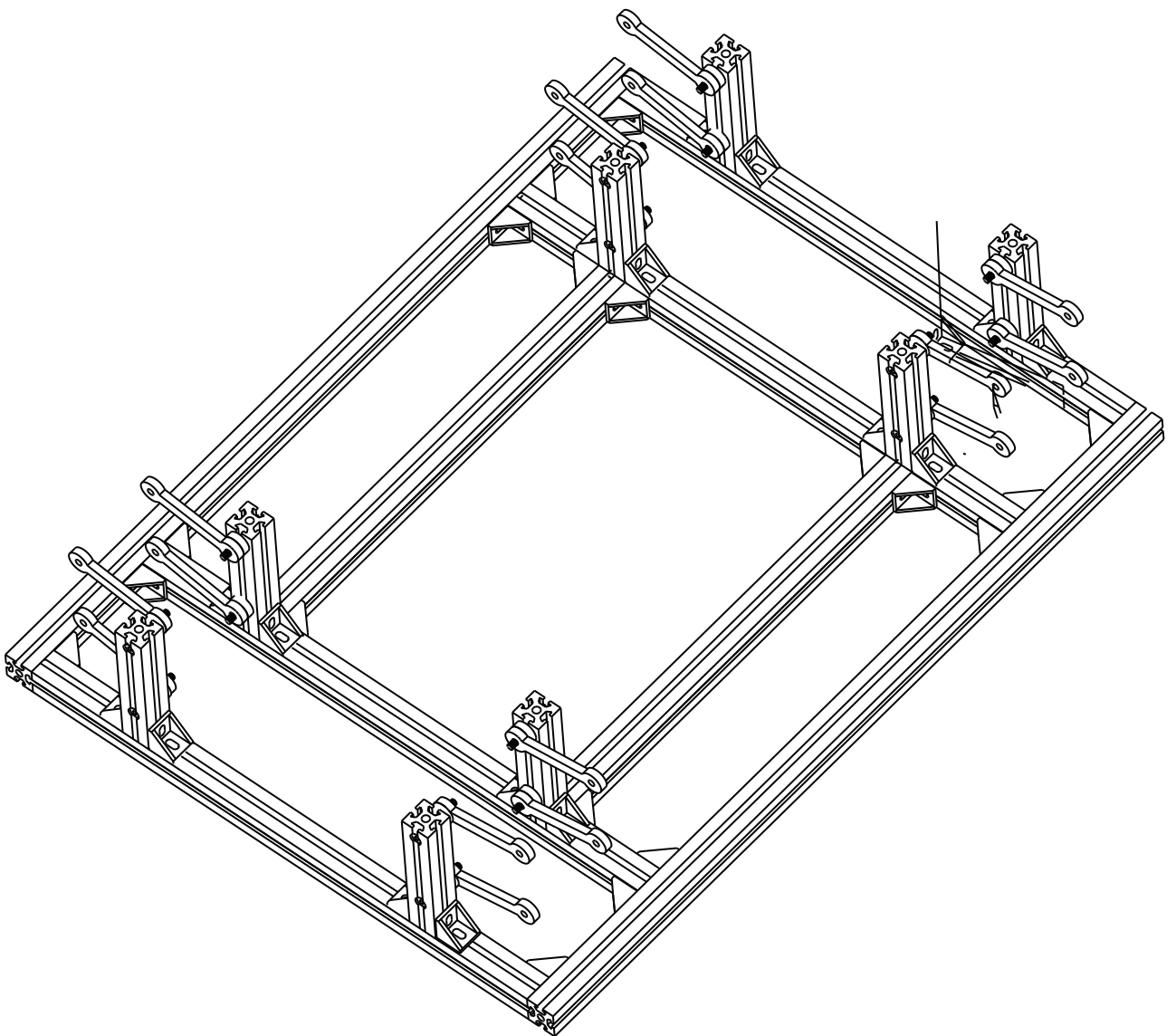
3. Next, take 2 pieces of 550mm length 20X20 extrusion as fix them as shown in fig. Make sure orientation of the extrusion while fixing the extrusion. Make sure it looks symmetric.



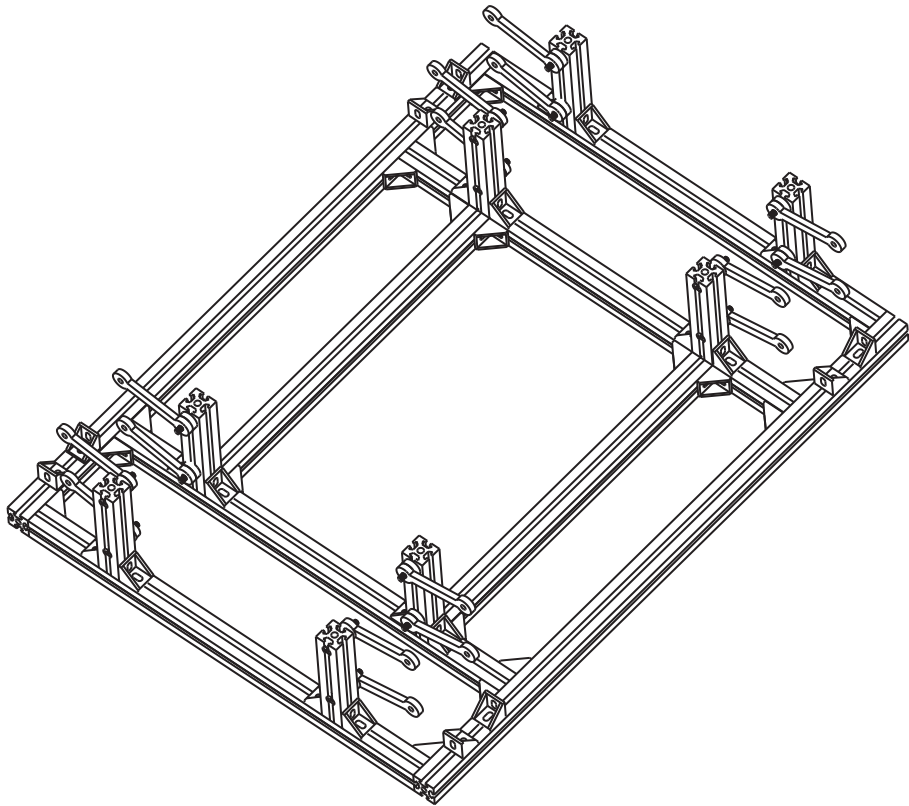
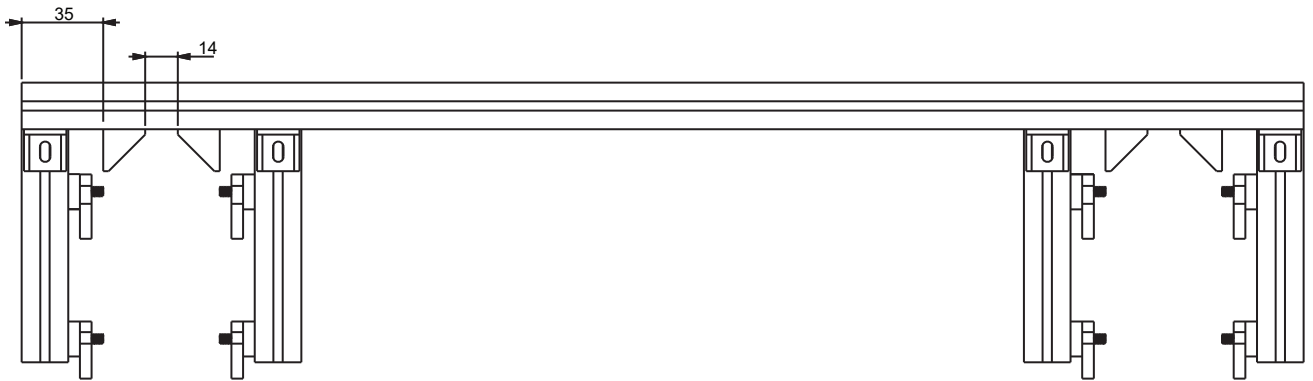
4. Now, Fix the assembly to the frame that we assembled in step (2) as per image.
Here, we had completed assembly of chassis frame.



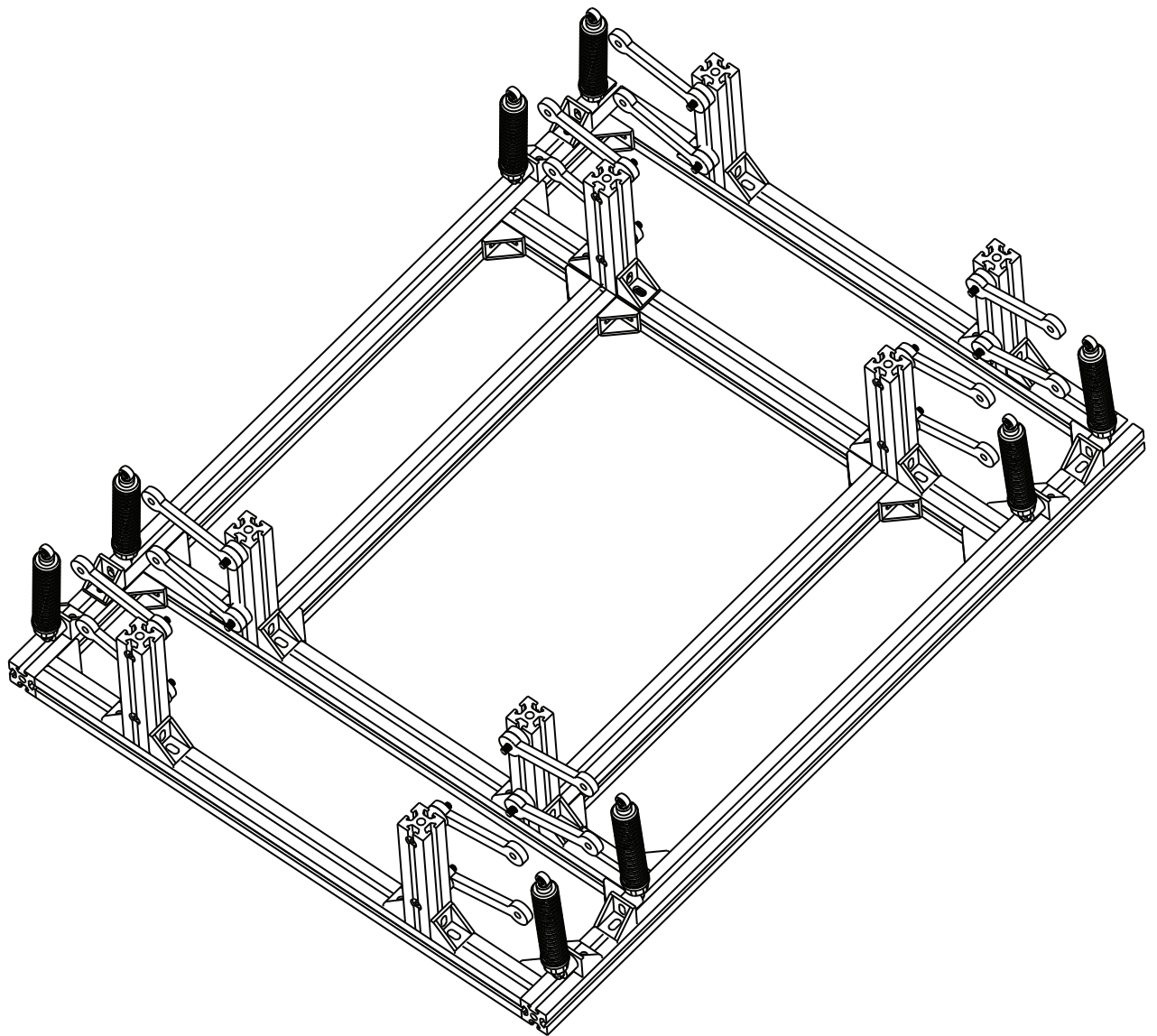
5. In this step, we will fix linkages to the frame assembly. For this, we will require Linkages, 5 mm spacers, M4X30mm Allen Bolt & M4 Nyloc Nut. Each of 16 pieces. You will get it bag labelled with linkage Assembly. Now fix the linkages as per shown in image. Do not tight the bolt. Make sure linkages will rotate freely.



6. Mount 8 pieces of Corner bracket along the length of 550mm extrusion as shown below. Make sure it is mounted correctly as per dimension shown in image.
(Note – All dimensions are in mm)

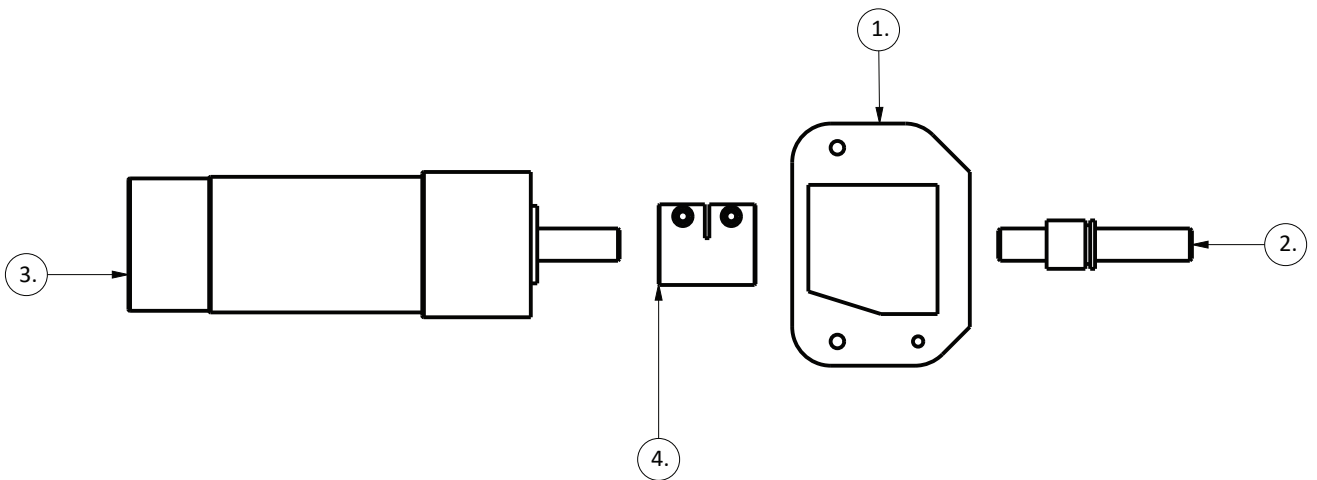


7. We will fix 98mm Metal Shock Absorber to the corner brackets mounted in last step. For this, we will use 10mm spacers, M4X20 Allen bolt & M4 Nyloc Nut with 8 qty of each. Mount all Shock Absorber with the help of the 10mm spacer. Make sure it was mounted with correct orientation. (Refer fig.)

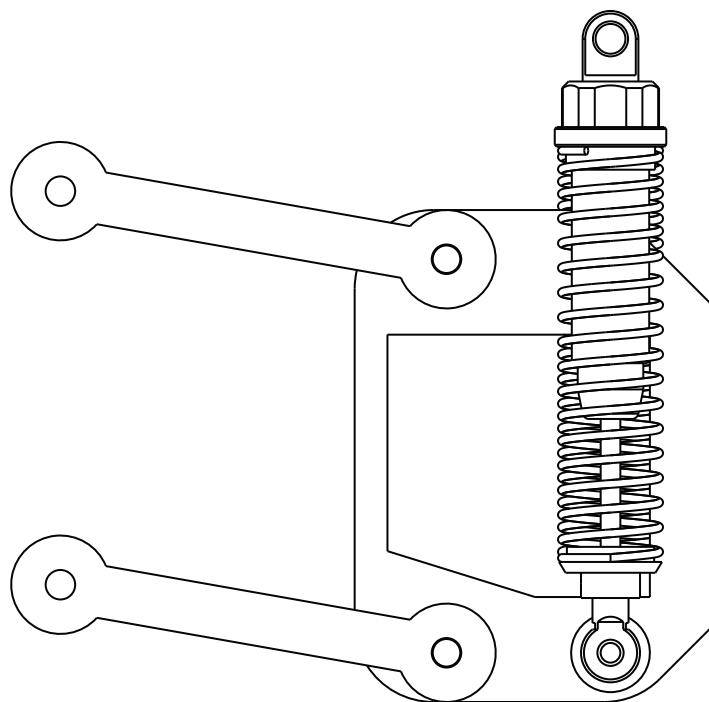
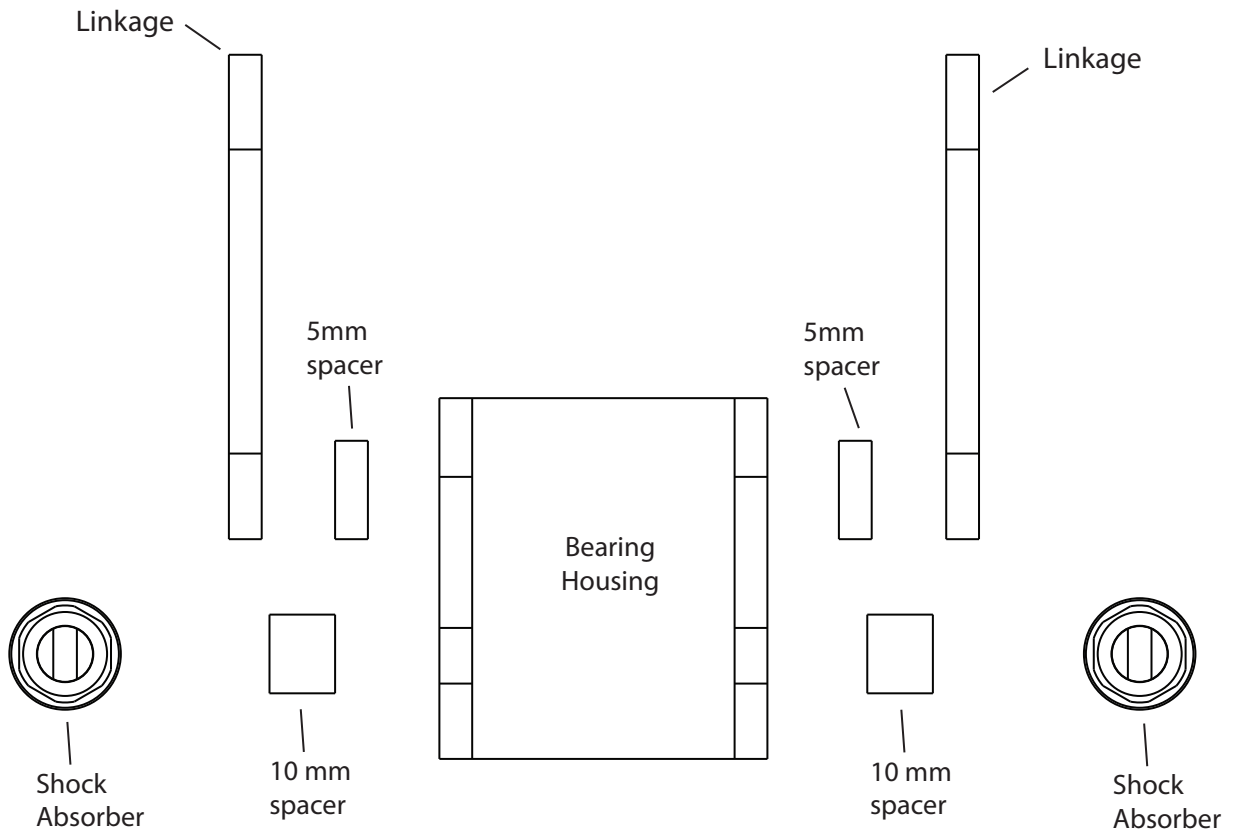


8. Drive Assembly. This step is very important. In this, we will do drive assembly of the chassis. We need Orange PGM45775 Planetary DC Motor, 6902ZZ Bearing Housing with shaft & 10X10 Rigid Coupling. Do the assembly as per shown in below fig.

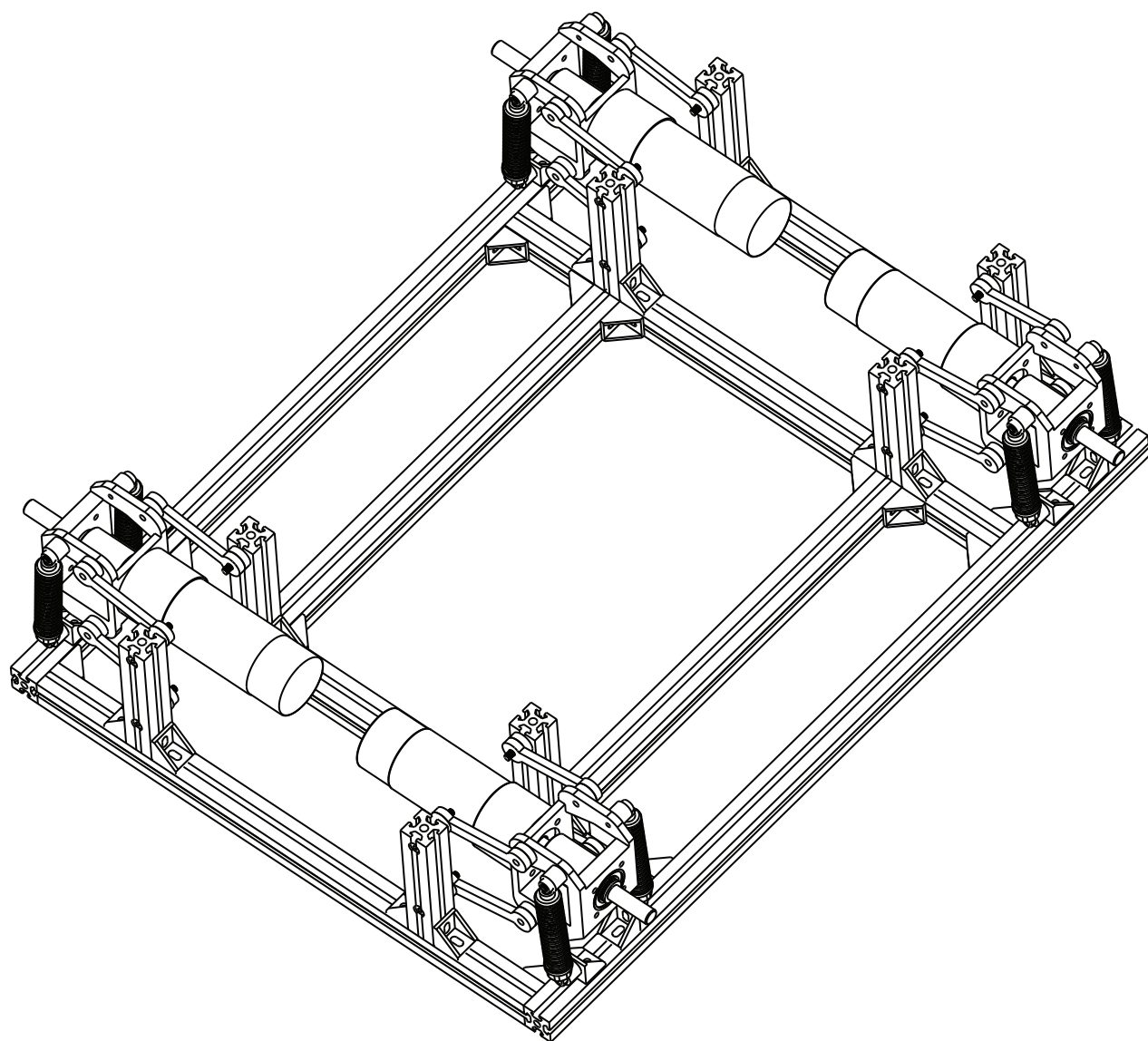
Item no.	part.name	QTY
1	6902ZZ-BEARING-HOUSING	1
2	MS-SHAFT	1
3	PGM45775-DC-MOTOR	1
4	RIGID-COUPLING-10X10	1



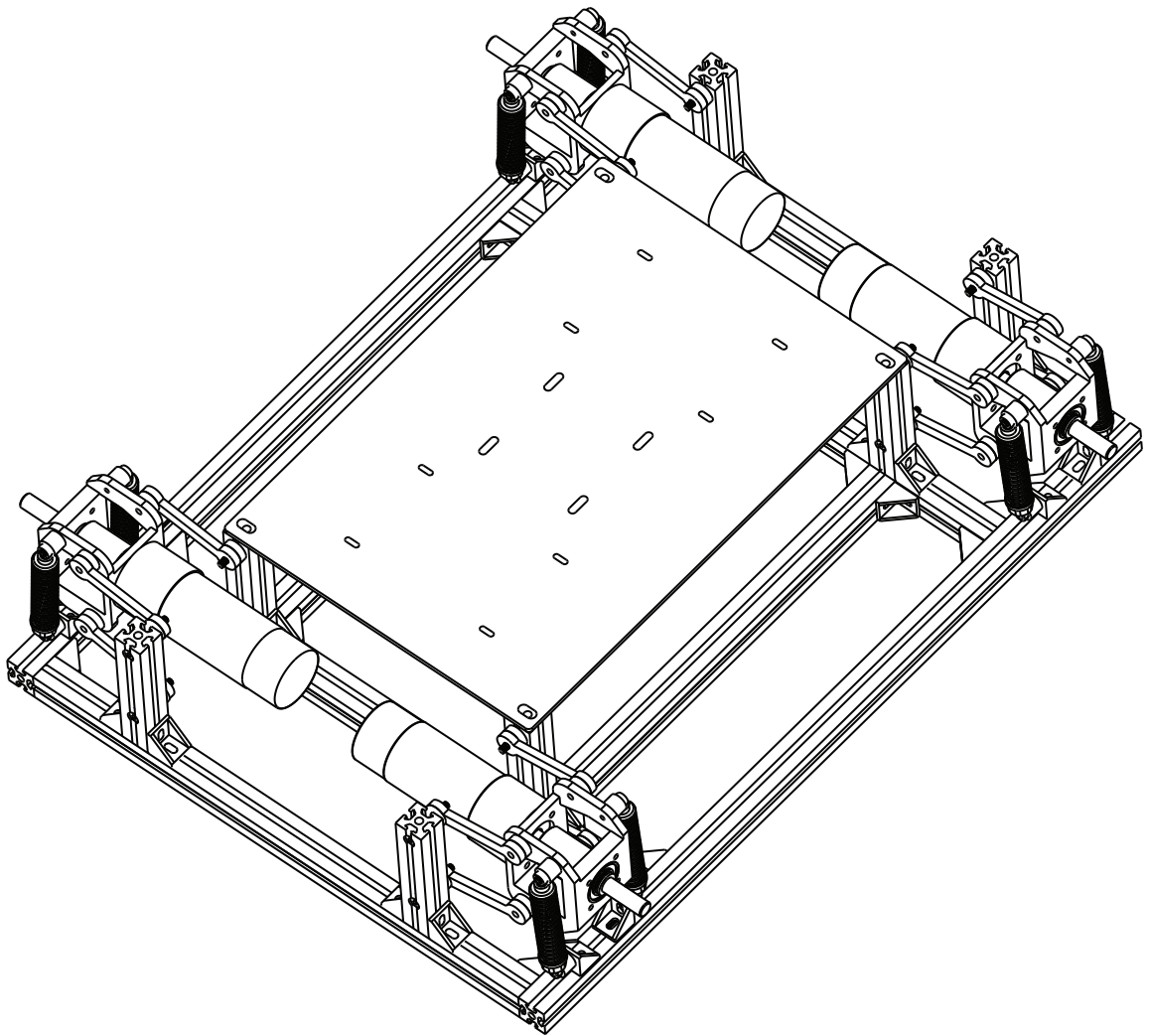
9. Now, we will fix Drive Assembly set up to the frame. This step is quiet hard compare to other steps. Fix the Drive Assembly carefully. Use 5mm spacers & M4 Allen Bolt with Nyloc Nut for linkages & 10 mm spacers & M3X25 Allen bolt with Nyloc Nut for Shock Absorber. Tight the all Linkages by making sure that Shock Absorber Spring compress & expand freely.



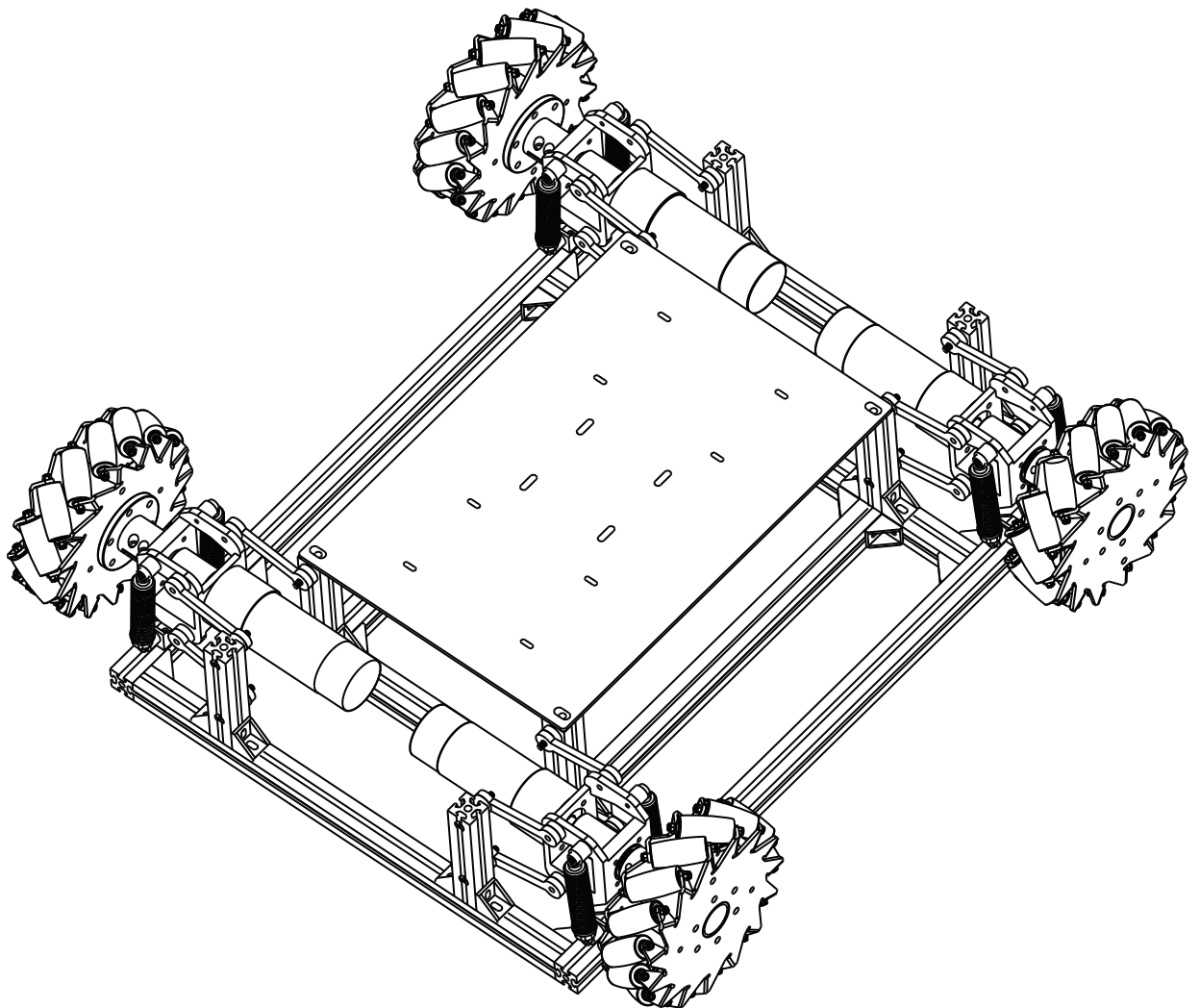
10. Repeat the procedure & mount all Drive Assembly as per shown in below fig.



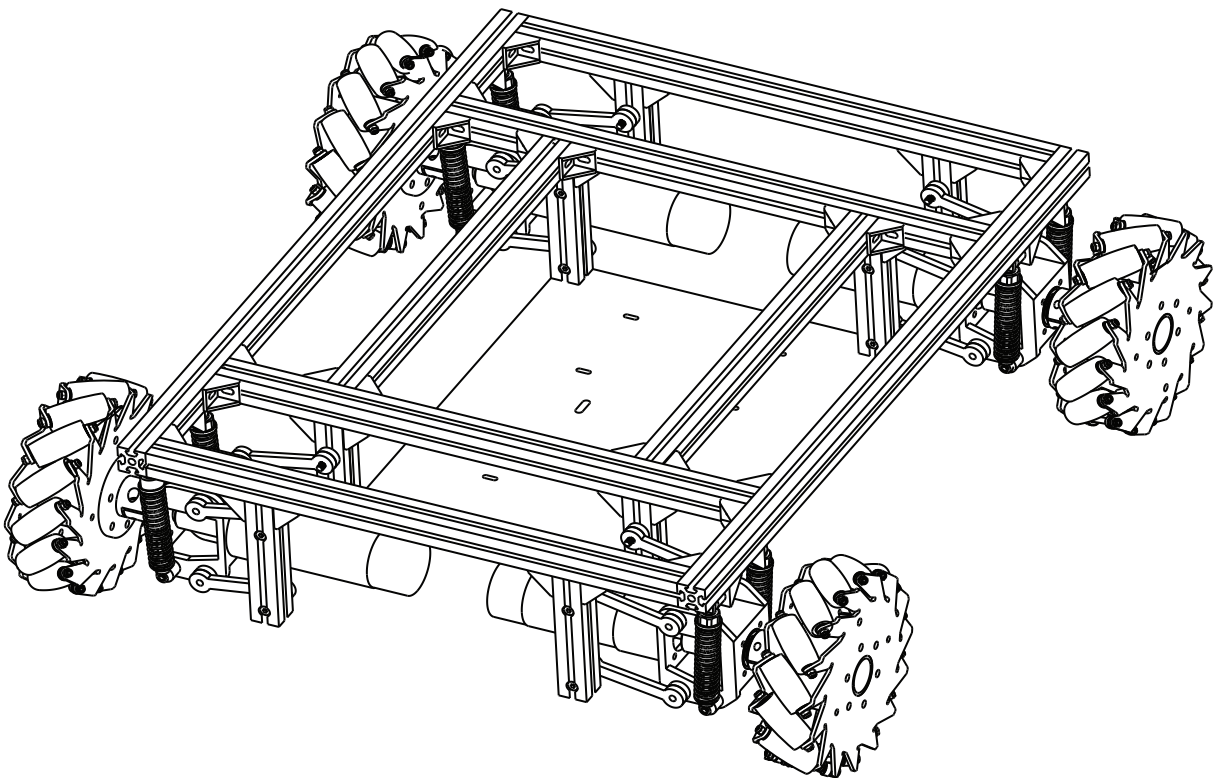
11. Mount the bottom plate to the frame with help of M6 Allen Bolt as per below fig. You can mount Motor Drivers, Controllers or power supply on the bottom plate as per your requirement.



12. Now, Fix the 10mm Antislip Coupling to the 152mm Mecanum Wheel with the help of M5X65 Allen Bolt & M5 Nyloc Nut. Attach the Wheel Assembly to the Bearing Housing Shaft. Tight the M4 bolts on the flange side of the coupling. Tight it gradually. Apply the same procedure for rest of the Wheels.



13. Finally, we will mount the Top Plates to the chassis frame with the help of M4 Button Head Allen bolt & Sliding Nut.



14. Chassis is ready for move, Enjoy the ride!

