

LWP legs build instructions

Please set your servos to 90 degrees before proceeding with build



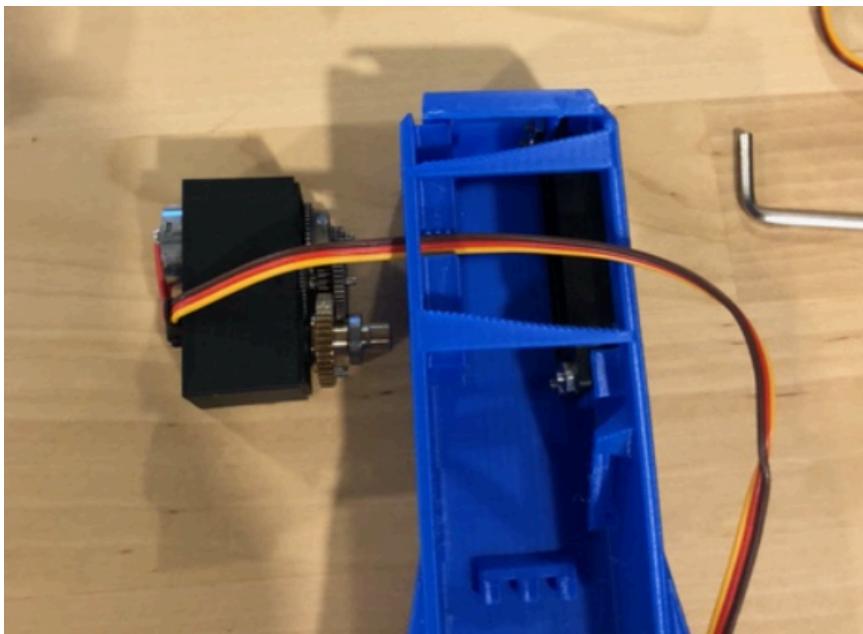
Necessary components: two lower legs, two upper legs, two servos, two servo back axels L and R, six small bearings, two knee rollers and several rubber bands.



Remove screws from servo back and slide front cover off of servo. Be careful not to disrupt the exposed gears of the servo. Attach the front cover and knee roller to the upper leg. The servo piece should be set next to the leg and the knee roller goes over the servo piece.



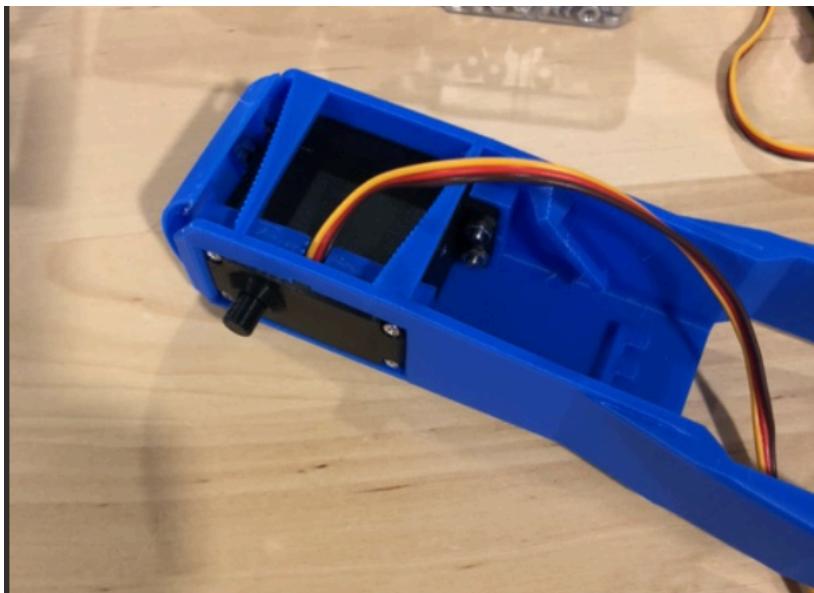
Observed from the back of the leg. Make note the screw nuts are in contact with the knee roller. Servo piece is sandwiched between printed parts.



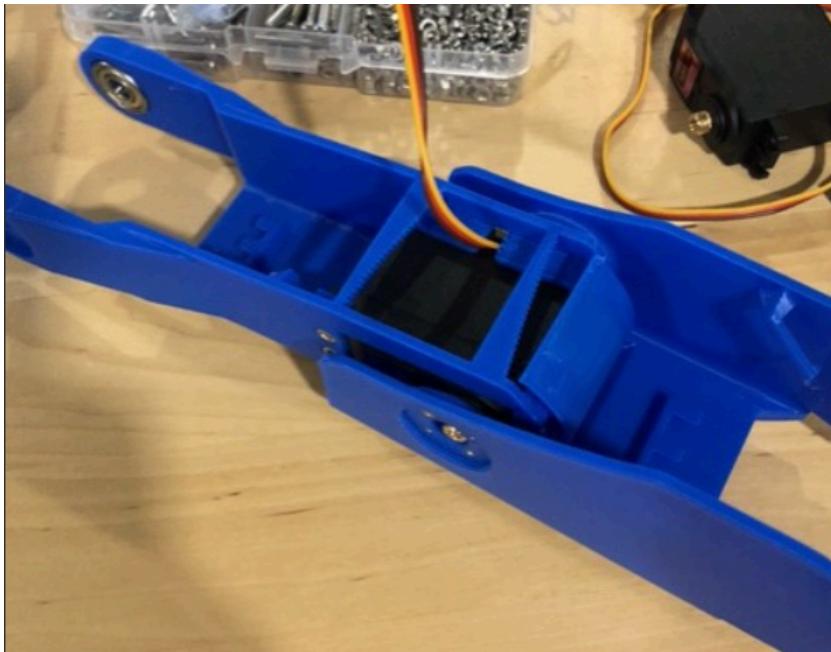
Next you'll want to route the servo wire through the opening in the leg piece and slide the servo into the slot. Take your time. The gears can fall off of the servo and then your day will go from bad to worse if you have to fumble with the greasy gears trying to get them back in place.



Servo body inserted into leg piece. Note the wire is pulled through the gap in the leg piece.



Next you'll want to attach the servo back axel piece (L or R) and reinsert the screws. It might be a tight fit and you might have to work a bit to get it in but it will fit.



Place a bearing in the correct location of the lower leg (not pictured). It takes a little finesse to get the upper leg in place. First place the servo spline in the opening (pictured). Then spread the plastic of the lower leg a bit. It is compliant. Guide the servo back axle into the center hole of the bearing and squeeze the lower leg closed to seat the bearing all the way onto the axle. Don't attempt to remove the joint or you'll break the servo back axel and will need to replace it.



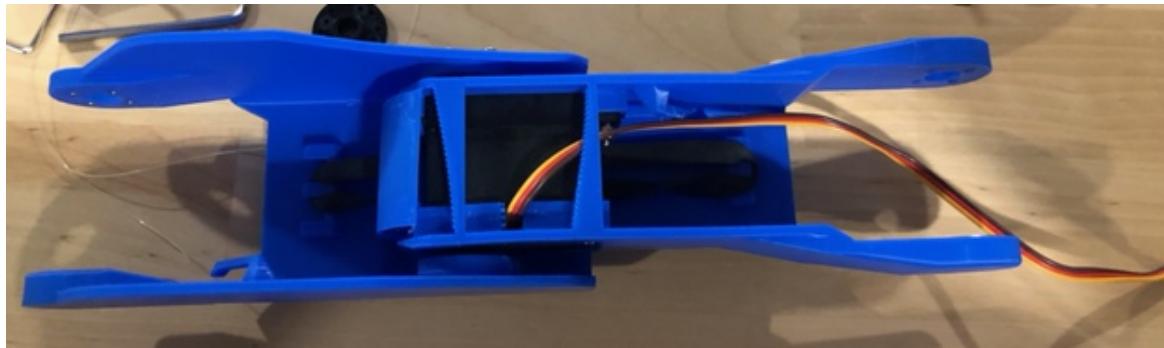
Set the leg to this angle before mating the servo disk to the servo spline and placing the screws in the lower leg. If the servo is set at 90 degrees, this is a good half way position of the joint.



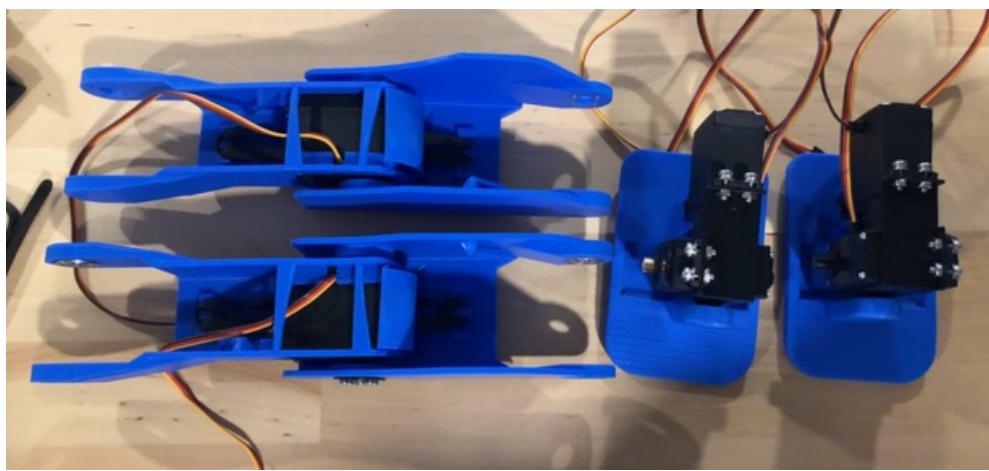
All screws placed in joint.



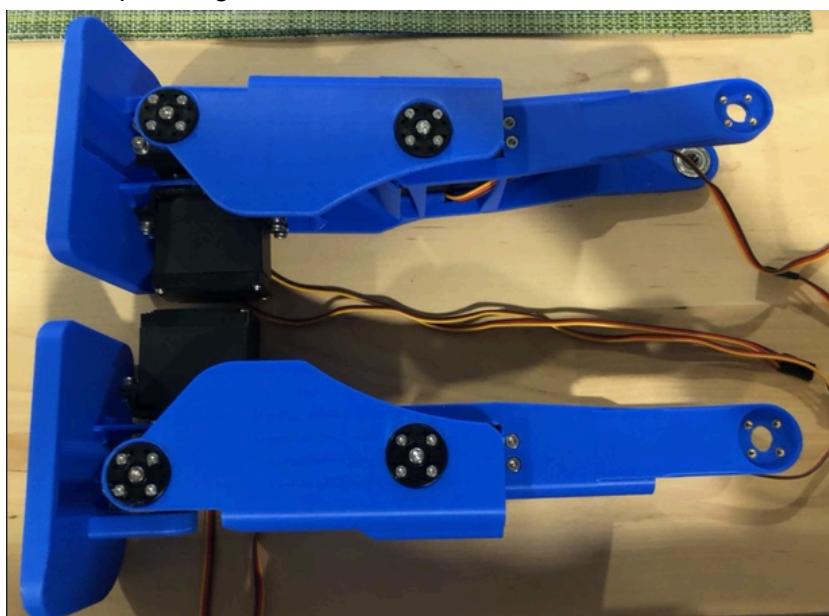
Slide a piece of fishing line through the small gap between the leg roller and upper leg. Wrap around rubber band, double back, and pull rubber band through the gap.



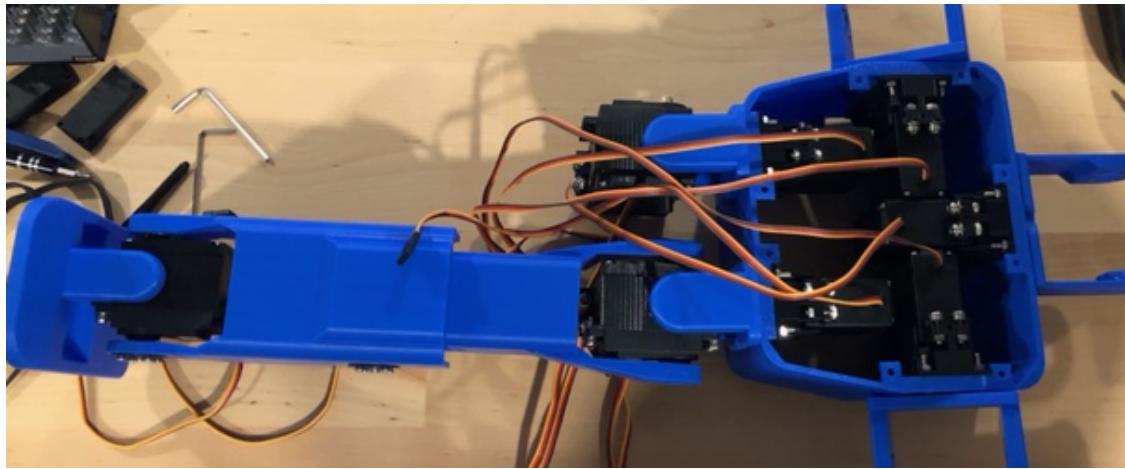
Attach rubber band/s to rubber band hooks.



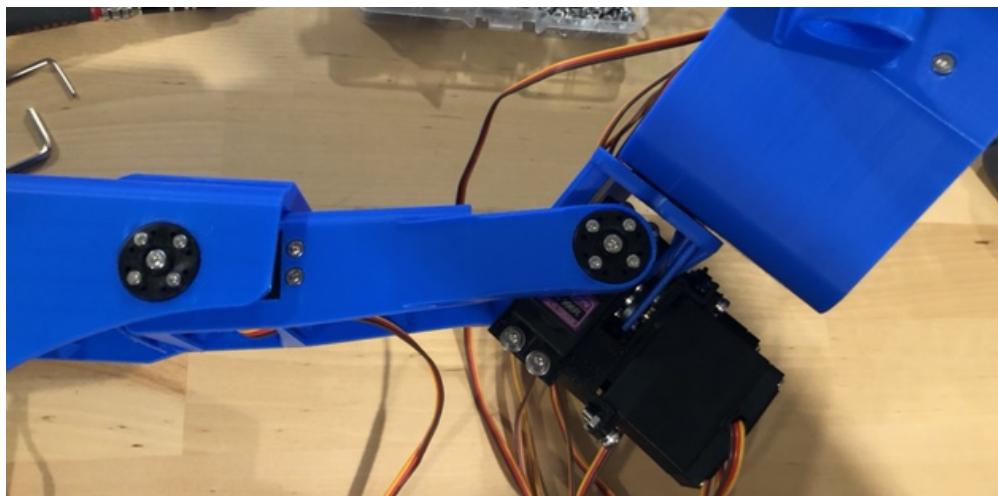
Two complete legs and feet.



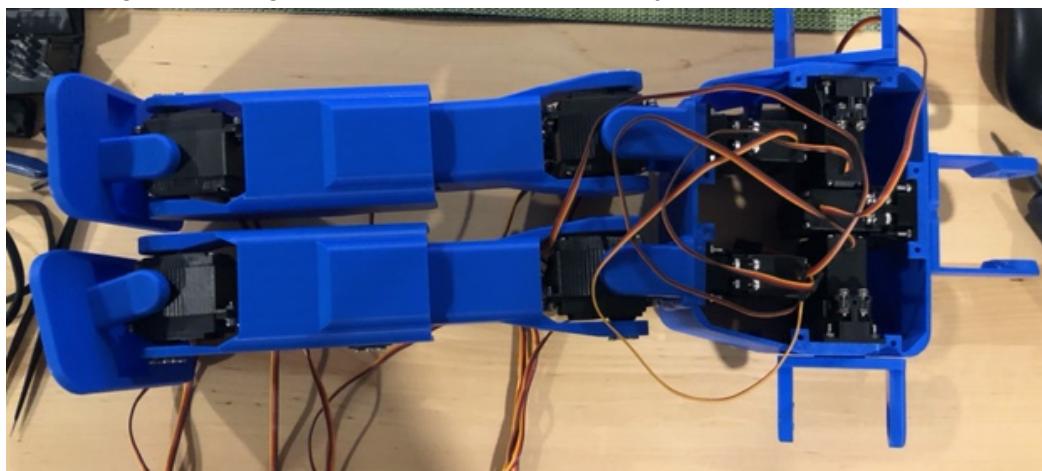
Two complete legs. Attach servo disk to the front foot servo in this orientation. This is a good 90 degree mid point for the front foot joint.



Attach leg to hip joint like this.



This is a good 90 degree midpoint for the front hip joint.



Two legs attached.

This completes the leg section of the build instructions.