

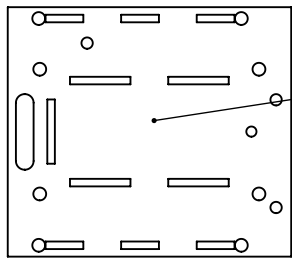
4volt Jansen Walker Beta 2

There are several ways to assemble the Jansen Walker, this is the way I prefer.

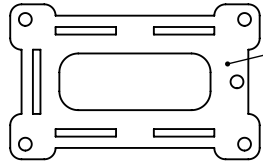
1. Assemble the main platform and center the threaded rods and bolt them down.
2. Start building the legs outwards from the center.

Good luck, be sure to send me a picture of your finished walker, I would love to see them.

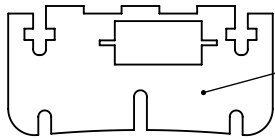
Jeremy
4volt.com/projects/jansen/



Body Base Plate



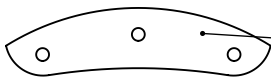
9v Battery Bottom Plate



Body Side Plate



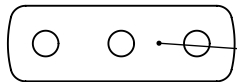
Body Side Plate Support Bracket



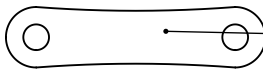
Leg & Axle Support



Disposable Wrench (7mm, 9mm)



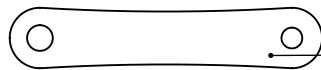
Drive Wheel/Bar



Leg Connector Inside - 3mm



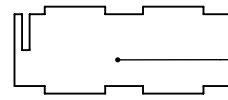
Leg Connector Outside - 2mm



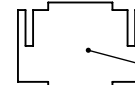
Drive Bar Upper



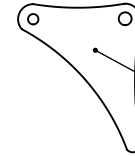
Drive Bar Lower



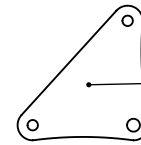
9v Battery Side Plate



9v Battery Back Plate



Foot



Shoulder
Shown in vertical position.
Part is slightly taller than wide



Servo Gear 1
(1:1 Ratio 16 teeth)



Servo Gear 2
(1:1 Ratio 16 teeth)



Axle Gear 1
(1:1 Ratio 16 teeth)



Axle Gear 2
(1:1 Ratio 16 teeth)



Servo Gear 1
(1:1.8 - 10 teeth)



Servo Gear 2
(1:1.8 - 10 teeth)



Axle Gear 1
(1:1.8 - 18 teeth)



Axle Gear 2
(1:1.8 - 18 teeth)



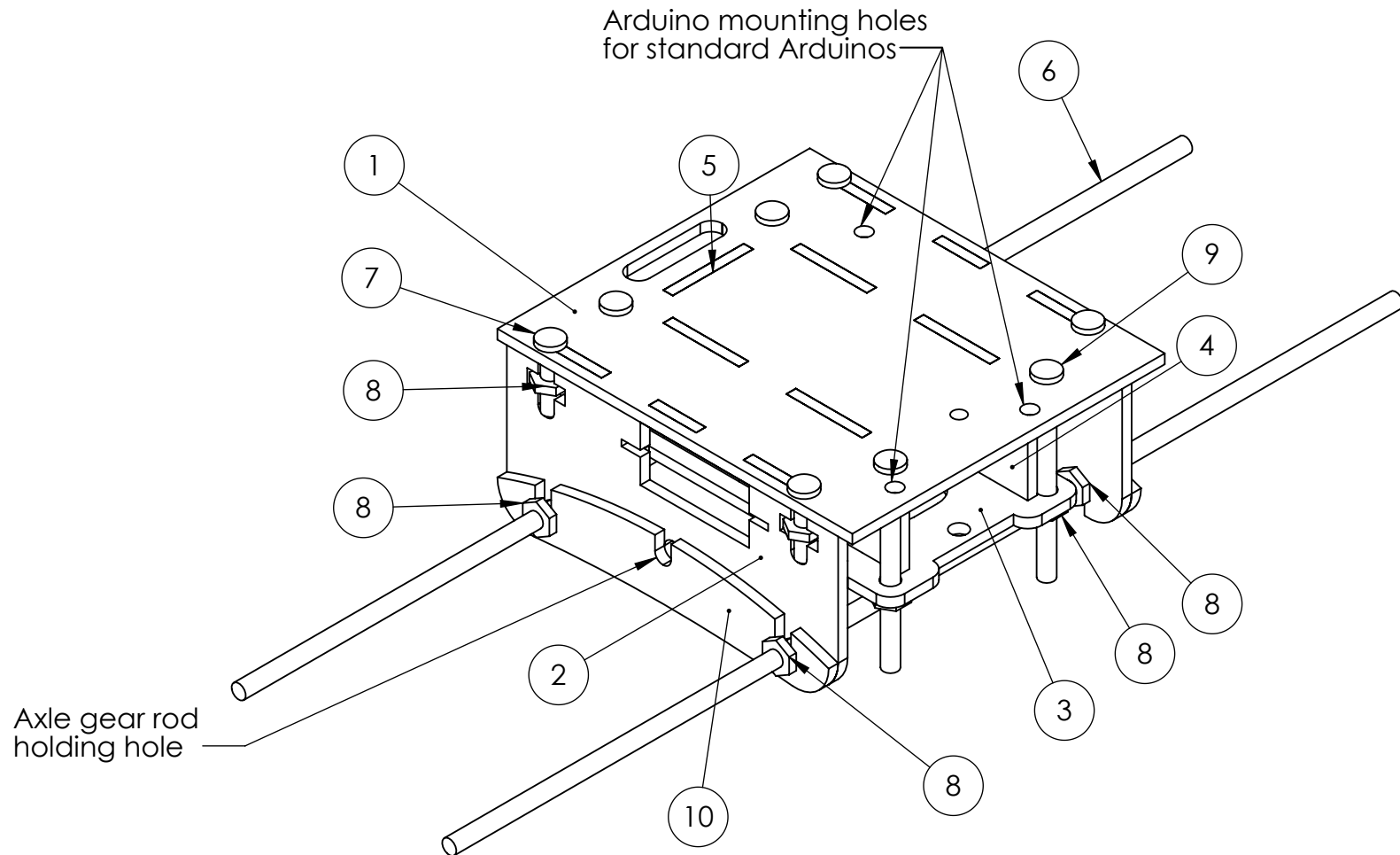
Spacer

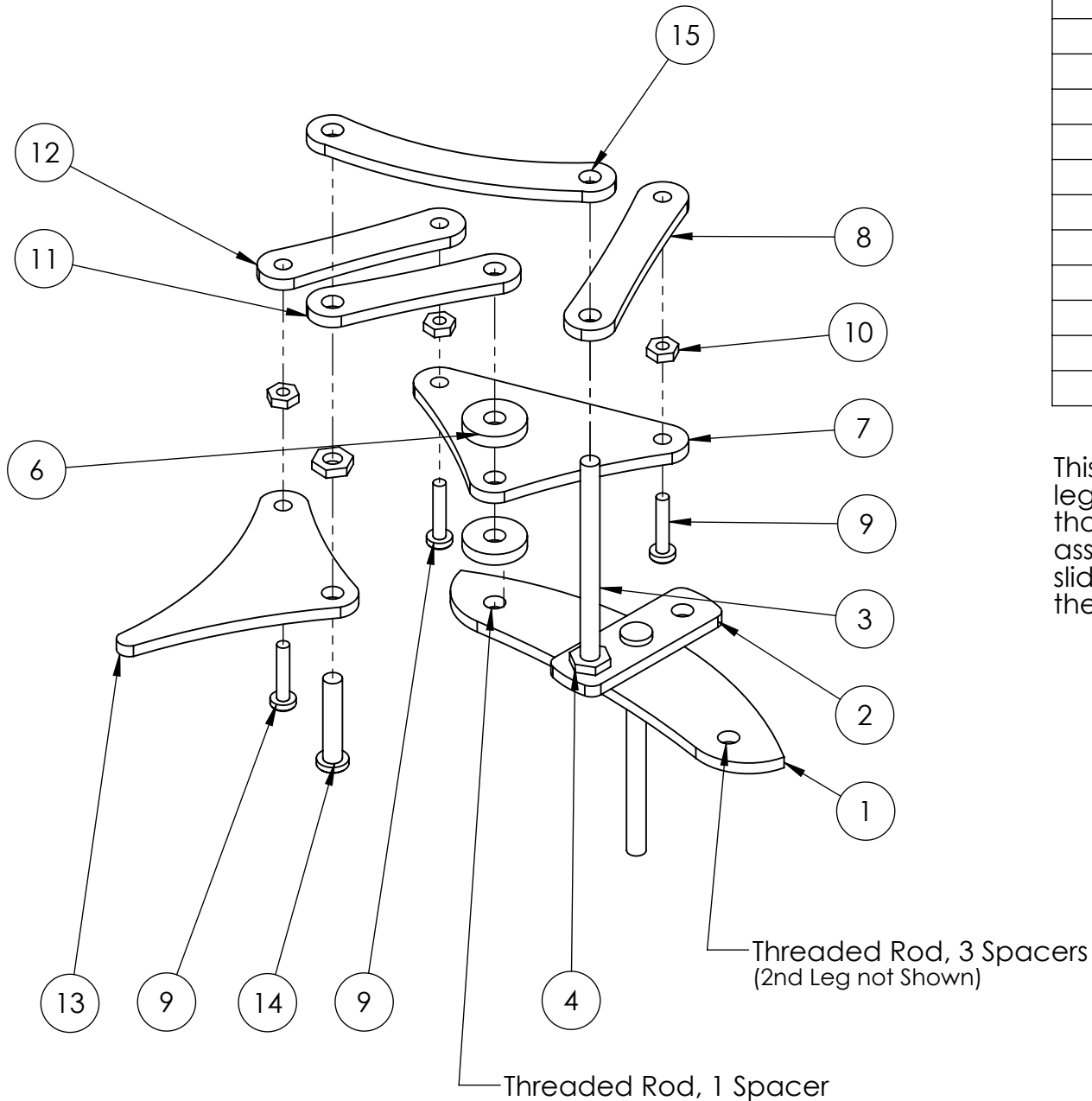
Warning! - When assembling this section, do not over tighten bolts or screws, the plastic will crack.

If a bolt or screw does not fit, do not force it, you will likely crack the plastic. Instead use a drill to widen the hole in the plastic. Pay special attention of the servo mounting slots.

If you find the nuts are hard to rotate on the threaded rod, try using a drill to spin the rod and a pliers to hold the nut. Do not use a drill to tighten the nuts.

ITEM NO.	PART NUMBER	QTY.
1	Body Base Plate	1
2	Body Side Plate	2
3	Battery Cover 9v	1
4	Battery Side Plate	2
5	Battery Front Plate 9v	1
6	Threaded Connecting Rod	2
7	Bolt - 3x12mm	4
8	Nut - 3mm	16
9	Bolt - 3x30mm	4
10	Body Side Plate Support Bracket	2





ITEM NO.	PART NUMBER	QTY.
1	Support Plate	1
2	Driving Wheel	1
3	Bolt - 3x40mm	2
4	Nut - 3mm	16
5	Washer - 3mm	6
6	Spacer - m3x10mm	6
7	Shoulder	2
8	Drive bar - Upper	2
9	Bolt - 2x10mm	6
10	Nut - 2mm	18
11	Connector	2
12	Connector - 2mm	2
13	Foot	2
14	Bolt - 3x15mm	2
15	Drive Bar - Lower	2
16	Washer - 2mm	6

This drawing shows how to assemble the leg with the support plate and driving bar, though practically it may be easier to assemble the legs without them, and then slide the legs onto the threaded rod once the support plate is mounted.

Axle

It is important for the entire axle to be tightened properly, the connection though the support plate should be loose and easy to turn, but the driving wheel/bar should be tightly fastened to the bolt that drives the legs. When done properly the entire axle should rotate easily in the support plates. You may want to leave the servo gear off while testing the legs and axle.

The relative rotation of drive wheel/bar is important, each segment should be rotated 1/3rd forward relative to it's driving segment. When you look down the length of the legs, the drive wheel/bar will form a star pattern.

The offset driving bolts may be shortened to save space, depending on the length of your threaded rod it may be necessary.

Gears

The gear sets should be glued together as shown there are two gear pieces for each complete gear. There are two sets of gears. The 1:1 ratio gears (16 tooth) for higher speeds, and the 1:1.8 ratio gears (10 and 18 tooth) give more power.

To attach the the servo gear, fit it over the servo horn, then use a screw provided with the servo to tighten it down. If the servo gear fits poorly on the servo horn, superglue is a good permanent alternative.

ITEM NO.	PART NUMBER	QTY.
1	Support Plate	3
2	Driving Wheel	5
3	Bolt - 3x30mm	4
4	Bolt - 3x15mm	2
5	Nut - 3mm	27
6	Washer - 3mm	3
7	Threaded Connecting Rod	2
8	16t Gear - M3 Hole	1
9	16t Gear - M3 Nut	1
10	16t Gear - Servo Hole	1
11	16t Gear - M1 Hole	1

