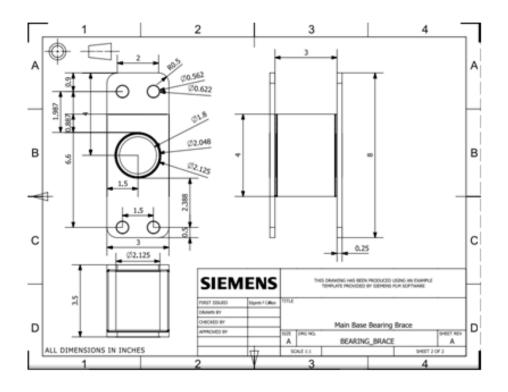
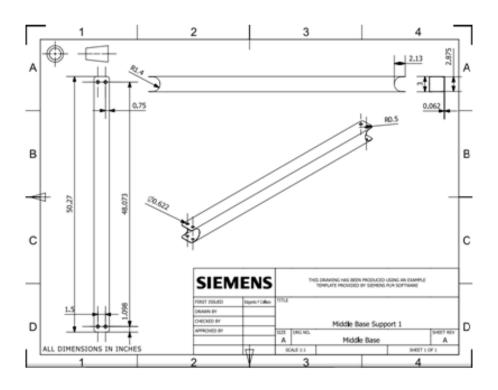
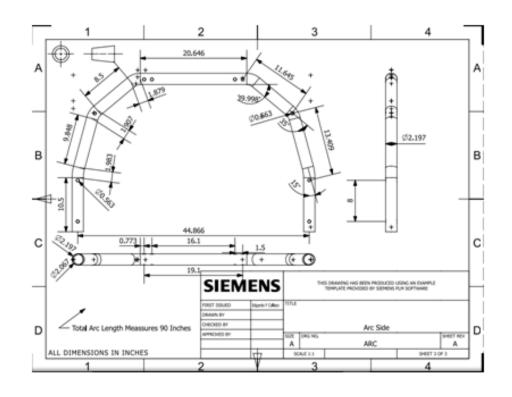
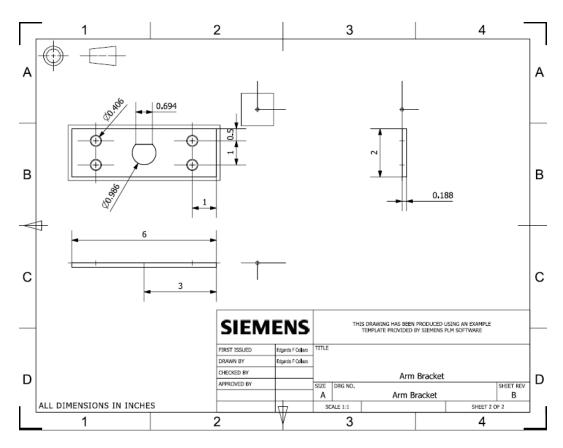
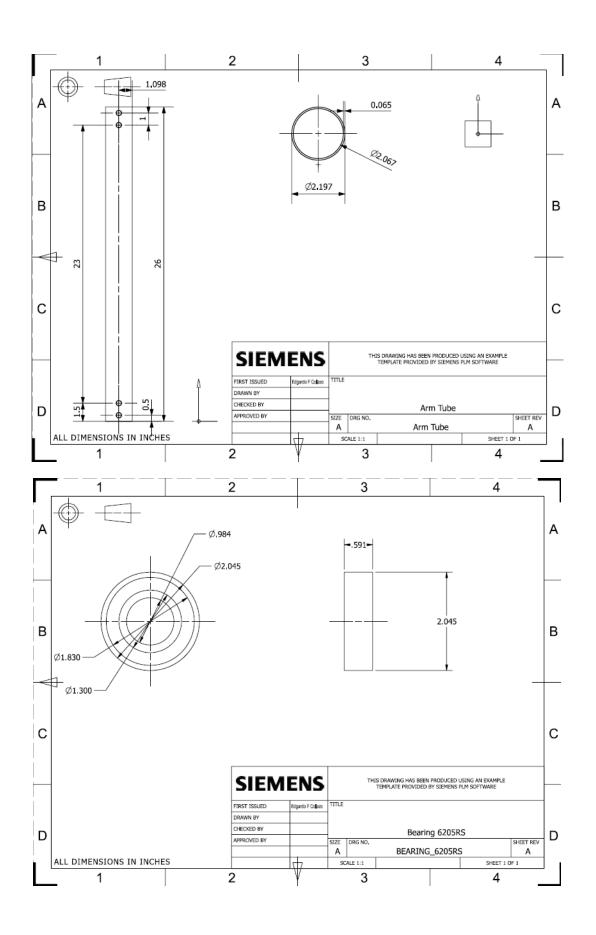
Blueprints and user manual - Columpio

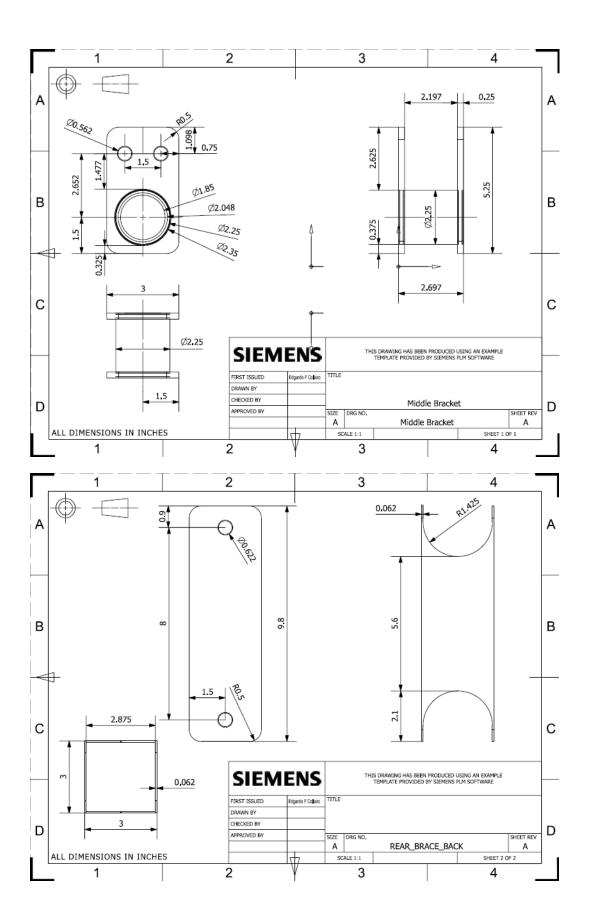


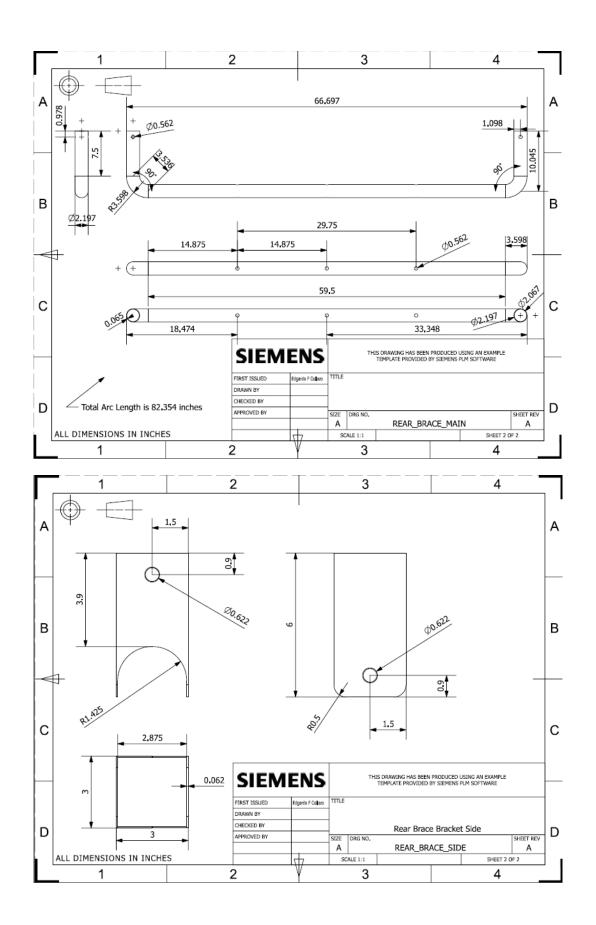


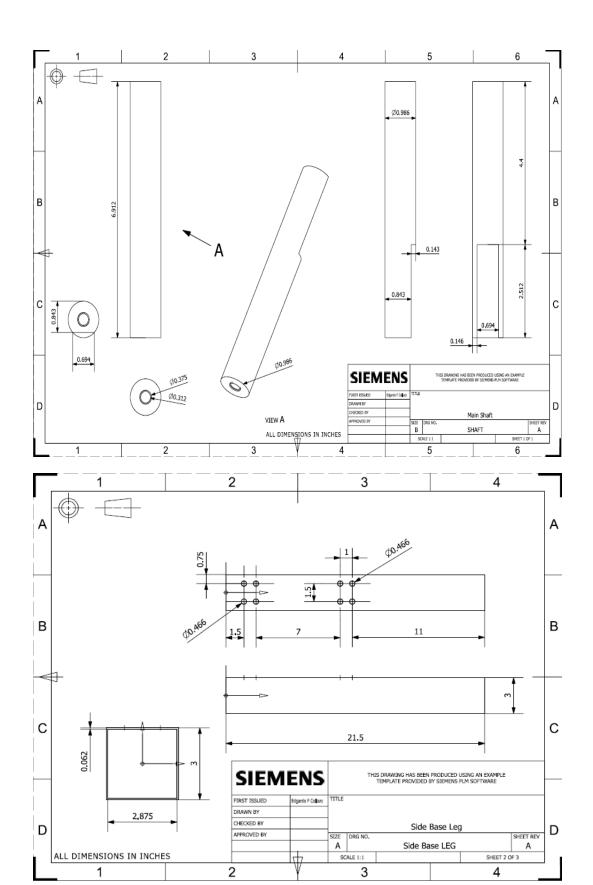


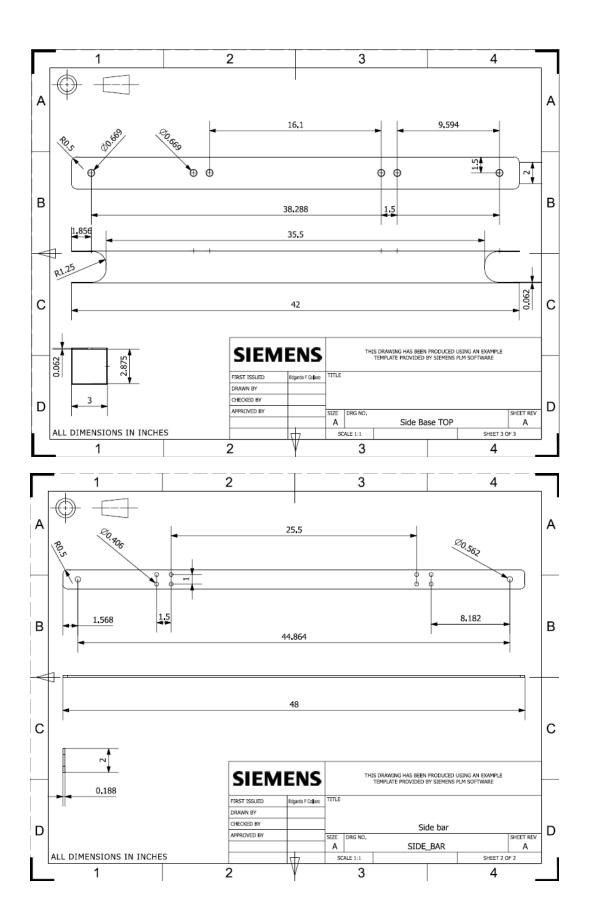












Manual assembly



Sensory stimulation equipment for adults with disabilities

Parst that should come in the package:

PC NO.	PART NAME	QTY
1	Bearing - 6205RS	16
2	Washer 0.5 Thick	76
3	Washer 0.5 Thin	24
4	Side Bar	8
5	Arc	2
6	Bearing Brace	4
7	Side Base Leg	4
8	Side Base Top	2
9	Plain Wahser, A Narrow, Al, 0.5	116
10	Hex Nut, Al, 0.5-13_UNC	54
11	Hex Bolt, Al, 0.5-13x4.5	24
12	Hex Bolt, Al, 0.5-13x4	22
	Plain Washer, A Narrow, Al,	
13	0.375	128
14	Hex Nut, AI, 0.375-16_UNC	64
15	Hex Bolt, Al, 0.375-16x4	32
16	Rear Brace Side	4
17	Rear Brace Main	2
18	Rear Brace Back	3
19	Shaft	8
20	Hex Bolt, Al, 0.375-16x3.25	32
21	Arm Bracket	16
22	Arm Tube	8
23	Hex Bolt, Al, 0.5-13x3.5	8
24	Middle Bracket	4
25	Mid Base Tube	2
26	Middle Base	2
27	Hex Bolt, Al, 0.375-16x1	8



Image 3: arm tubes and arm brackets assembled

- 3. Use a ratchet and wrench to tighten the screws. In ilmage 3 you can see how it shoulb be.
- 4. Repeat the first 3 steps for the following 3 arms.

Middle assembly:

PC NO.	PART NAME	QTY
1	Bearing - 6205RS	8
2	Washer 0.5 Thick	16
9	Plain Washer, A Narrow, Al, 0.5	32
10	Hex Nut, Al, 0.5-13_UNC	16
12	Hex Bolt, Al, 0.5-13x4	8
23	Hex Bolt, Al,0.5-13x3.5	8
24	Middle Bracket	4
25	Mid Base Tube	2
26	Middle Base	2

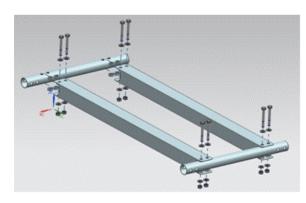


Image 4: middle base and mid base tube with the plain washers, hex bolt and hex nut.

Procedure:

1. Merge the middle base with the mid base tube. Put the plain washer, hex bolt (pc no. 12) and hex nut using the holes that are deeper in the tube, as shown in image 4.

ARM Assembly:

PC NO.	PART NAME	QTY
13	Plain Washer, A Narrow, Al, 0.375	16
14	Hex Nut, Al, 0.375-16_UNC	8
20	Hex Bolt, Al, 0.375-16x3.25	8
21	Arm Bracket	4
22	Arm Tube	2

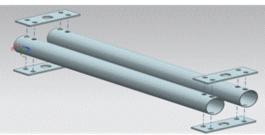


Image 1: arm tubes and arm bracket

Procedure:

 Place arm tube next to each other and arm bracket horizontally, as shown in image 1.

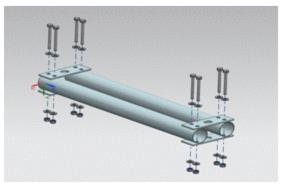


Image 2: arm tubes and arm brackects with the hex bolt, hex nut and plain washer

2. Before placing the hex bolt, put the the plain washer. After placing the pieces in place them across the plain washer and hex nut, as shown in image 2.

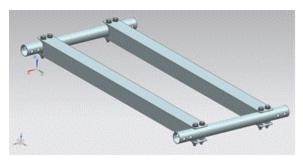


Image 5: middle base and mid base tube assembled

2. Use a ratchet and wrench to tighten the screws. The image 5 shows how this part shoul be assembled.



Image 6: middle brackets with the bearings

3. Place in the 4 middle brackets the bearings as shown in the image 6.



Image 7: assembly of the middle brackets in the middle base

4. Put the middle brackets on the mid base tube, hold with the plain washer, hex bolt (pc no. 23) and hex nut, as shown 9.

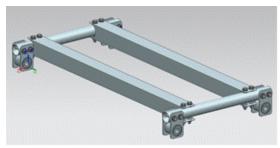


Image 8: middle base and middle brackets assembled

5. The image 8 shows as it should be the middle base.

Rear assembly:

PC NO.	PART NAME	QTY
2	Washer 0.5 Thick	20
9	Plain Washer, A Narrow, Al, 0.5	20
10	Hex Nut, Al, 0.5-13_UNC	10
12	Hex Bolt, Al, 0.5-13x4	10
16	Rear Brace Side	4
17	Rear Brace Main	2
18	Rear Brace Back	3

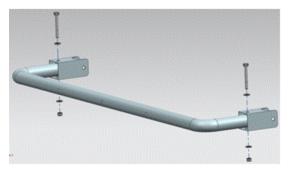


Image 9: assembly of the rear brace side on the rear side main

2. Put the plain washer, hex bolt and hex nut in the rear brace side to assembly on the rear brace main, as shown in image 9.



Image 10: assembly of the rear brace back

4. Hold the bottom of the rear brace back with plain washers, hex bolt and hex nut, as shown in the image 10.

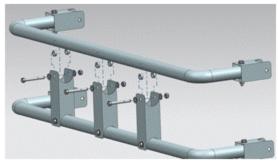


Image 11: assembly of the rear brace back in the upper rear brace main $% \left(1\right) =\left(1\right) ^{2}$.

5. Hold the top of the rear brace back with plain washer, hex bolt and hex nut to the top rear brace main. The image 11 shows as it should do.

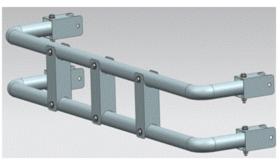


Image 12: rear part assembled

6. Use a ratchet and wrench to hold the screws, as shows in the image 12.

Side base assembly:

PC NO.	PART NAME	QTY
1	Bearing- 6205RS	4
2	Washer 0.5 Thick	12
3	Washer 0.5 Thin	8
4	Side Bar	4
5	Arc	1
6	Bearing Brace	2
7	Side Base Leg	2
8	Side Base Top	1
9	Plain Washer, A Narrow, Al, 0.5	20
10	Hex Nut, Al, 0.5-13_UNC	10
11	Hex Bolt, Al, 0.5-13x4.5	8
12	Hex Bolt, Al, 0.5-13x4	2
13	Plain Washer, A Narrow, Al, 0.375	32
14	Hex Nut, Al, 0.375-16_UNC	16
15	Hex Bolt, AI, 0.375-16x4	16

Listing is for 1 of 2 total assemblies



Image 13: arc with side base leg and side base top

Procedure:

 Attach with the plain washers, hex nut and hex bolt the side base top and side base leg in the arc.

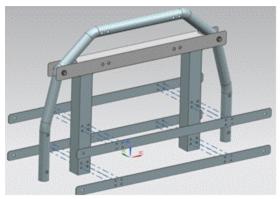


Image 14: side bar

2. The image 14 shows how you should position the side bar that will be attached with the side base leg and the arc.

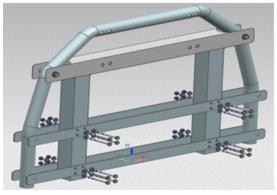


Image 15: side bar assembly

3. Hold the side bar with the plain washer, hex nut and hex bolt as shown in the image 15.



Image 16: arc assembled

4. The image 16 shows as it should be arch assembly.

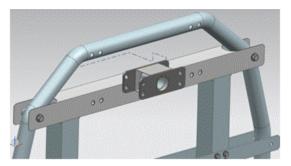


Image 17: bearings brace

5. In the image 17 is presented where you should place the bearings brace.

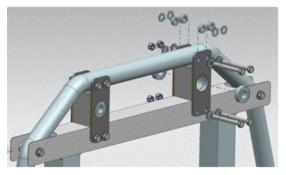


Image 18: bearings brace assembly

 Attach the bearing brace with the plain washers, hex bolt and hex nut, as shown in image 18.



Image 19: fully assembled arc

7. The image 19 shows as it should be assembled the arc. These steps must be repeated to join the other arc.

Fully Assembly:

PC NO.	PART NAME	QTY
2	Washer 0.5 Thick	76
3	Washer 0.5 Thin	24
9	Plain Washer, A Narrow, Al, 0.5	24
10	Hex Nut, Al, 0.5-13_UNC	8
11	Hex Bolt, AI, 0.5-13x4.5	8
27	Hex Bolt, Al, 0.375-16x1	8

Additional assemblies required

ASY NO.	PART NAME	QTY
1	Side Base	2
2	Arm	4
3	Rear Assembly	1
4	Shaft	8
5	Middle Assembly	1

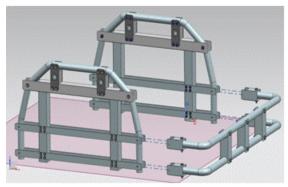


Image 20: side base and rear part assembly

Procedure:

 The image 20 shows as it should join the side base with rear part.

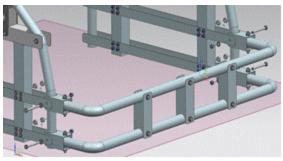


Image 21: side base and rear part assembly with plain washer, hex nut and hex bolt

2. Attach the rear part with the plain washer, hex nut and hex bolt in the side base, as shown in the image 21.

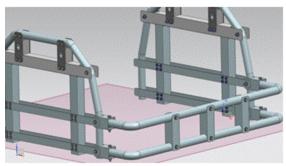


Image 22: side base and rear part assembled

3. The image 22 shows as it should be the side base with rear part .

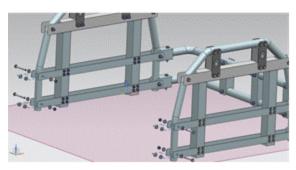


Image 23: side base completely assembly in the arc

4. Attach the side bar with the plain washer, hex nut and hex bolt in the arc, as shown in the image 23.

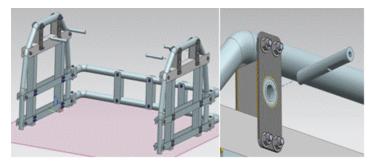


Image 24: assembly of the arm tube in the bearings

4. Place the arm tube in the bearings, as shown in the image 24.

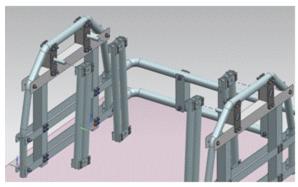


Image 25: place the arm in the side base

4. Place the arm in the side base as shown in the image 25.

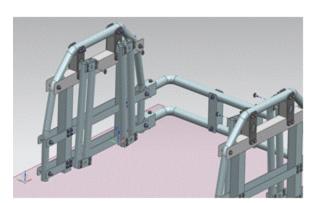


Image 26: assembly of the arm in side base

5. Attach the arms in the side base with plain washer, hex nut and hex bolt, as shown in the image 26.

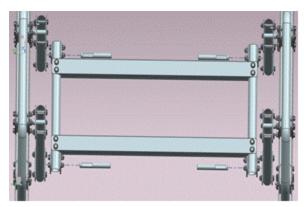


Image 27: middle base attached to the bottom of the arm

6. Attach the middle base with the arm tube in the arms that are place in the side base, as shown in the image 27.

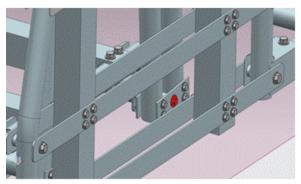


Image 28: place a plain washer, hex nut and hex bolt in the part that is in red.

7. Attaching a plain washer, hex nut and hex bolt, as shown in the image in red.

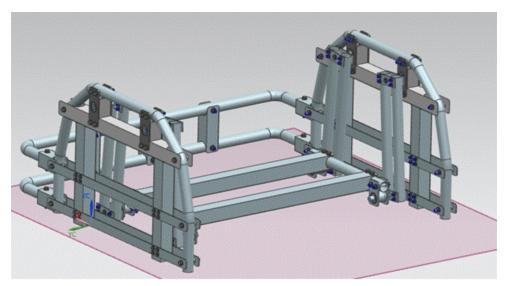


Image 29: fully assembled front view

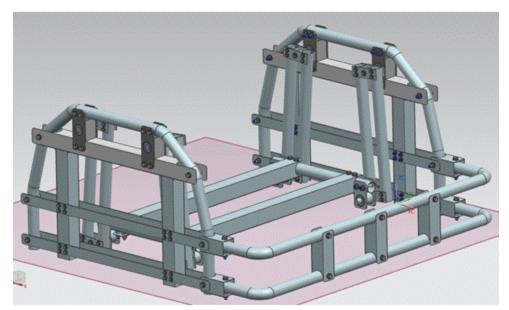


Image 30: fully assembled rear view

8. The image 29 and 30 shows it should be the fully assembled