Manufacturing instructions
Ramp for mobility scooter

lifting handles   anti slip rubber   fricting strips   placing handles   stoper

Exploded view
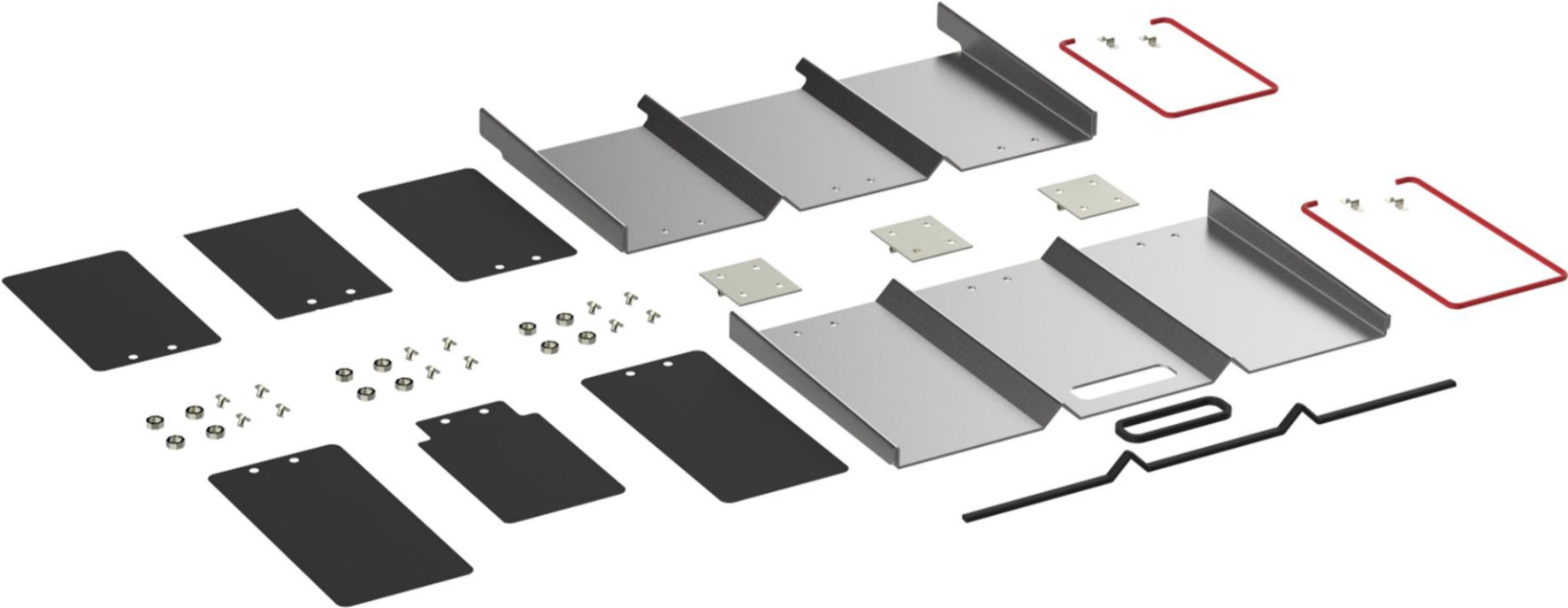
Materials for ramp

part no.	part name	material	info	file name	production technology	number of parts	supplier/professional
1	aluminum sheet	aluminum 6061	3 mm , 750x600 mm	file 1,2,3	laser cutting and bending	1	aluminum and metal store, metal-laser cutting place
2	door hinges	steel	load capacity 200 kg			3	hardware store
3	bolts	stainless steel	m6			18	hardware store
4	nuts	stainless steel	m6			18	hardware store
5	metal rod	aluminun/stainless steel	Ø6 mm, 796mm, 745 mm		bending	2	hardware store/metal profile supplier
6	omega connector	metal				4	hardware store
7	rubber sheet	rubber (silicon, neoprene, polisoprene etc.)	Ø1-2mm, 600x600 mm	file 4	laser cutting/scissors	1	
8	fast - curing adhesives	R21				1	hardware store
9	rubber strap	rubber (silicon, neoprene, polisoprene etc.)	700mm		glue	1	

Materials for carrier

part no.	part name	material	info	production technology	number of parts	supplier/professional
1	metal rod	metal	Ø8 mm, 2 m	bending	1	hardware store/metal profile supplier
2	round metal profile	metal	Ø25 mm, 40 mm		1	hardware store/metal profile supplier
3	polyaster straps	polyaster	1-2mm, 50mm, 250mm	sewing	1	sewing store
4	pvs strap	pvc	2mm, 40mm		1	sewing store
5	feedlock					sewing store hardware store
6	metal sheet	aluminum	50mm, 100 mm	cutting and bending	2	metal store
7	bolt	metal M3			2	hardware store
8	nut	metal M3			2	hardware store

Instructions for the ramp

Step 1

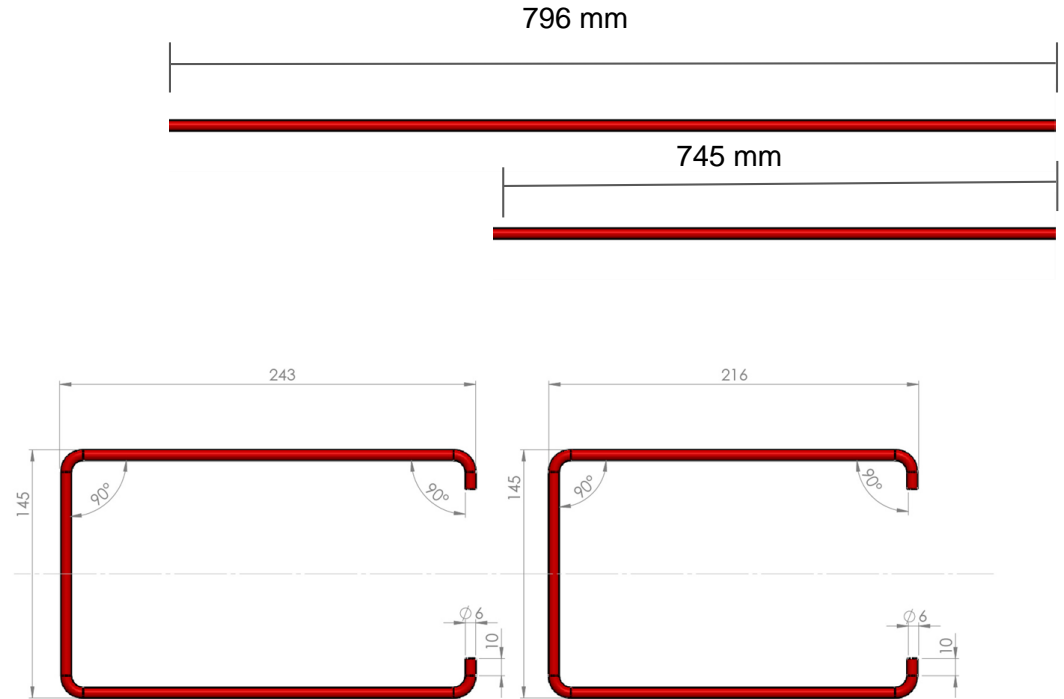Download files 1,2,3 and send the aluminum sheet with the instruction files for laser cutting and bending.
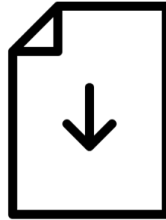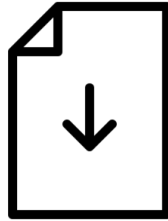
File 1,2,3
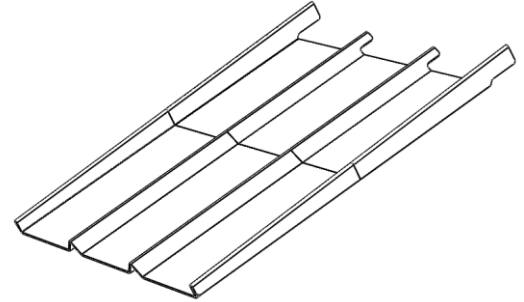
Step 2

Bend the rods according

to the sketch.

796 mm

745 mm

243

145

90°

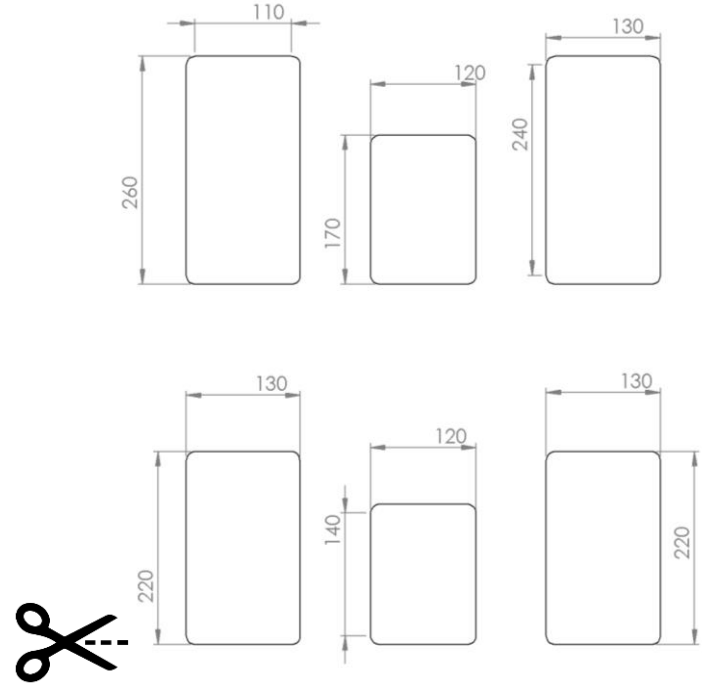90°

Ø 6

10

216

145

90°

90°

Ø 6

10

Step 3

Option 1: Download file 4 and send the rubber sheet for laser cutting.

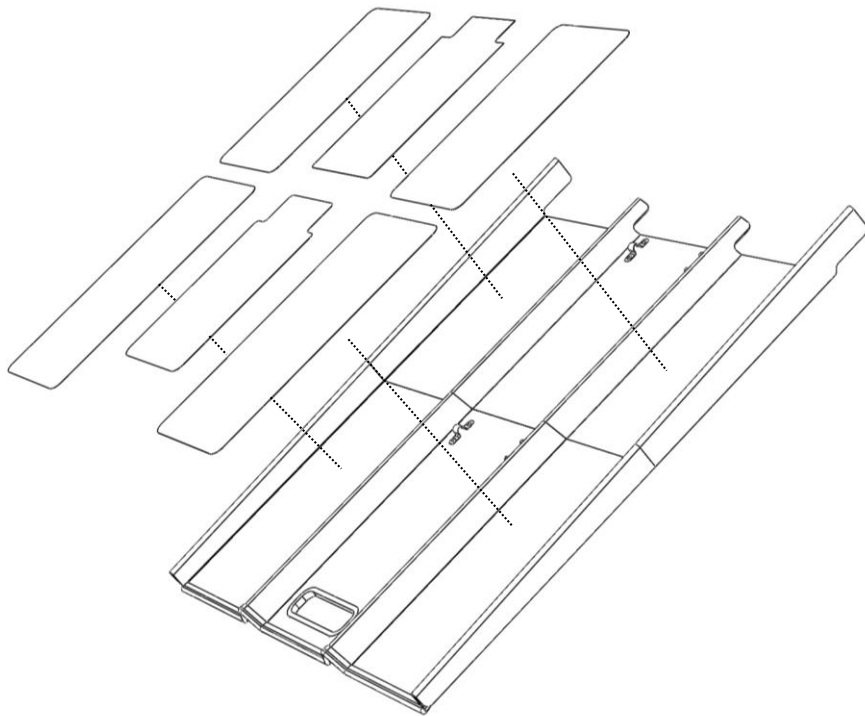Option 2: Cut the rubber sheet with scissors according to the layout in the sketch

File 4

Step 4

Use fast-curing adhesive to glue
the rubber parts to the aluminum
as shown.

Step 5

Drill holes in the aluminum sheet according to the hinges you have got. Use the bolts and nuts to connect between the 2 parts of the metal sheet and the hinges.
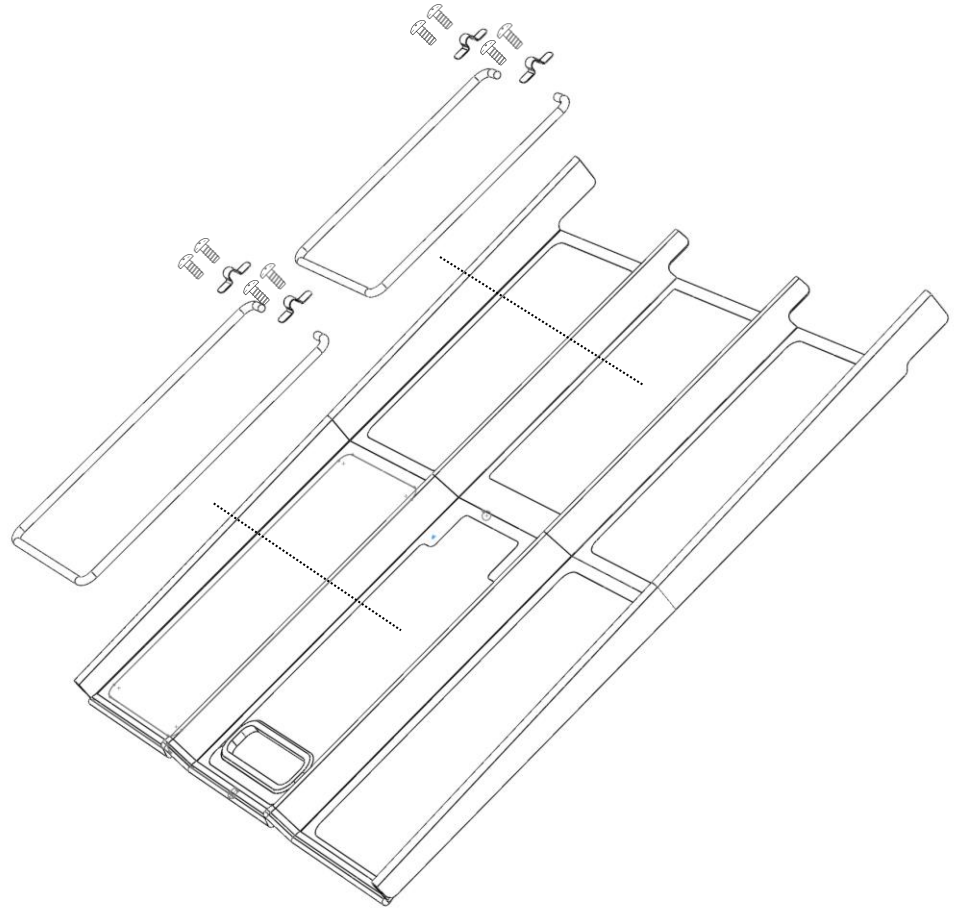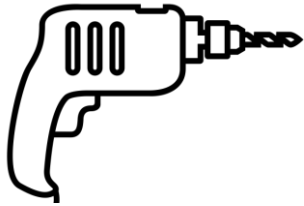
Notice: connect the bolts and the hinges as shown in the picture.
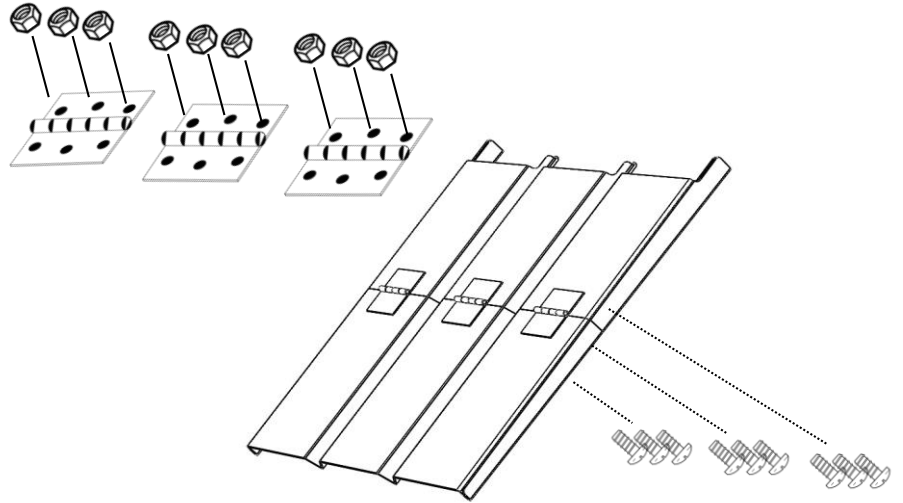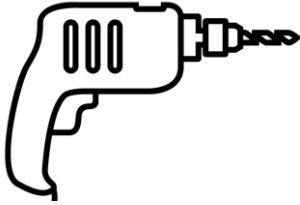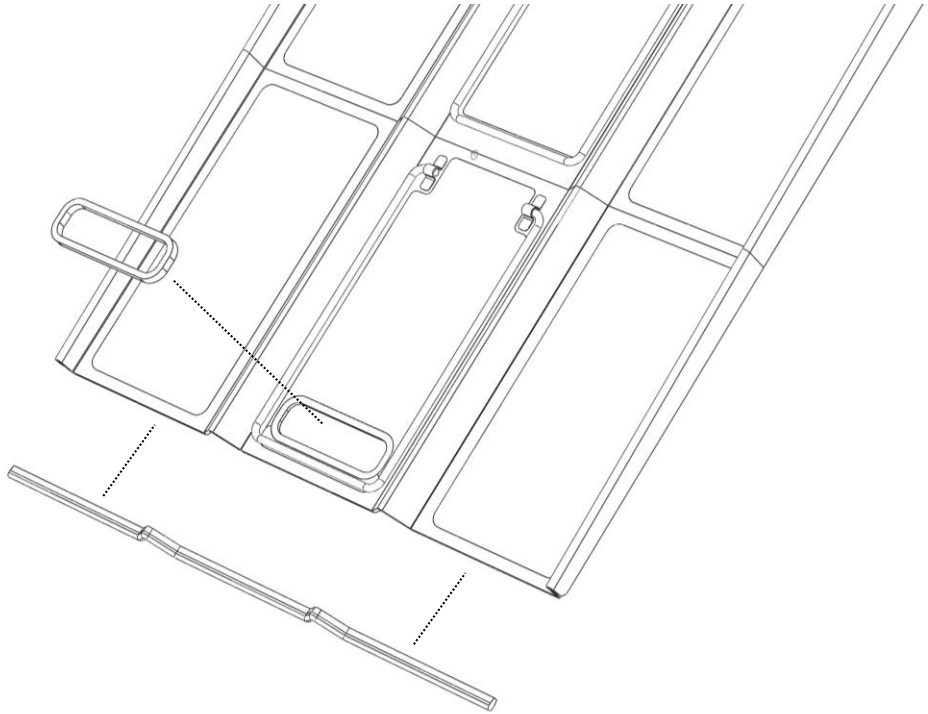
Bottom view of the ramp

Step 6

Drill holes for the small bolts in order to connect the bent rods to the metal sheet with the connectors, to the middle upper part of the ramp.

Step 7

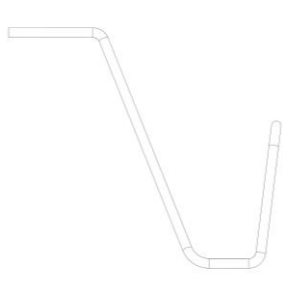Use fast-curing adhesive to paste the rubber strap to the bottom edge, and on handle.
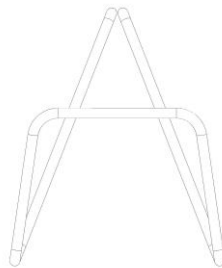
Ramp Carrier

INTRUDUTION

Every mobility scooter has a different way to connect a carrier. The following instructions are for the carrier we built for the Afikim Gogo mobility scooter.
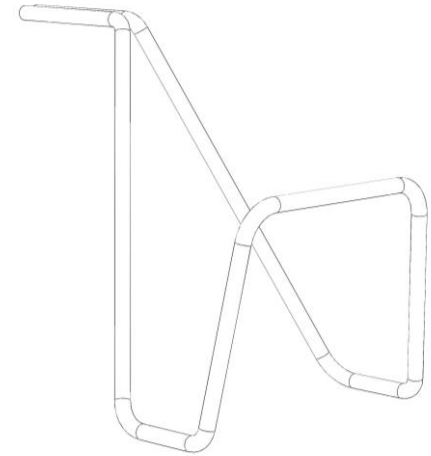
Step 1

Bend the metal rod according to the sketch
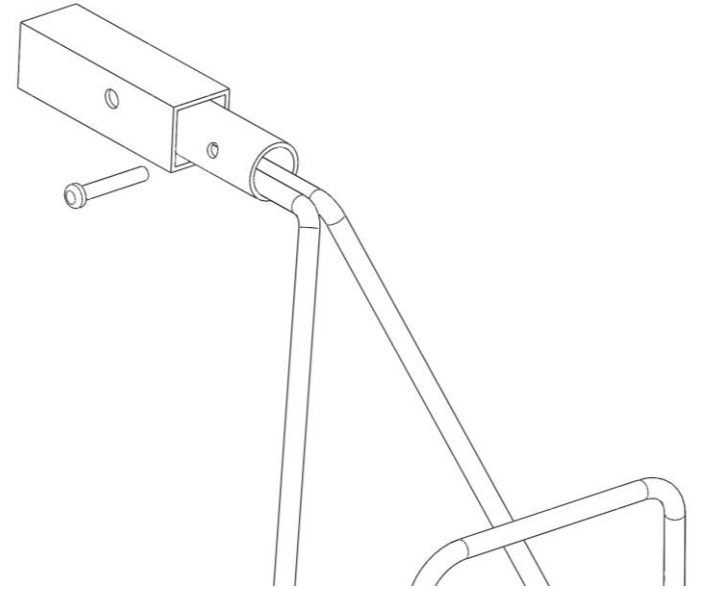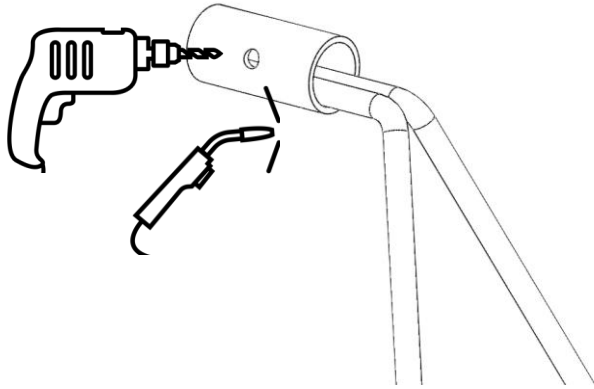

Side view

Front view

Step 2

Weld both edges of the rod to the inner part of the metal profile, and drill a hole through the metal profile for the bolt to go through.

Fit the welded part into the square profile on the back of the scooter, and use the bolt to secure it into place.
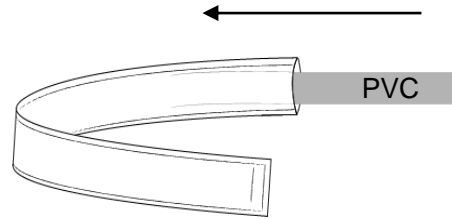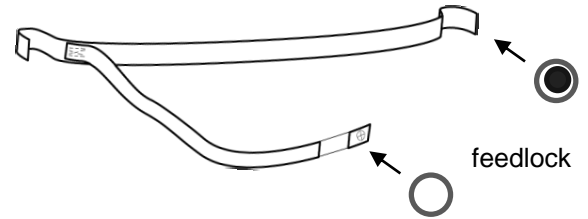
Upper part of the carrier

1. Fold the first strap in two and sew the sides.

2. Insert the PVC strap, and sew the final edge to close.

3. Sew the 2 straps together as shown in the sketch.

4. Sew the Feedlock to both edges of the straps (on the same side).
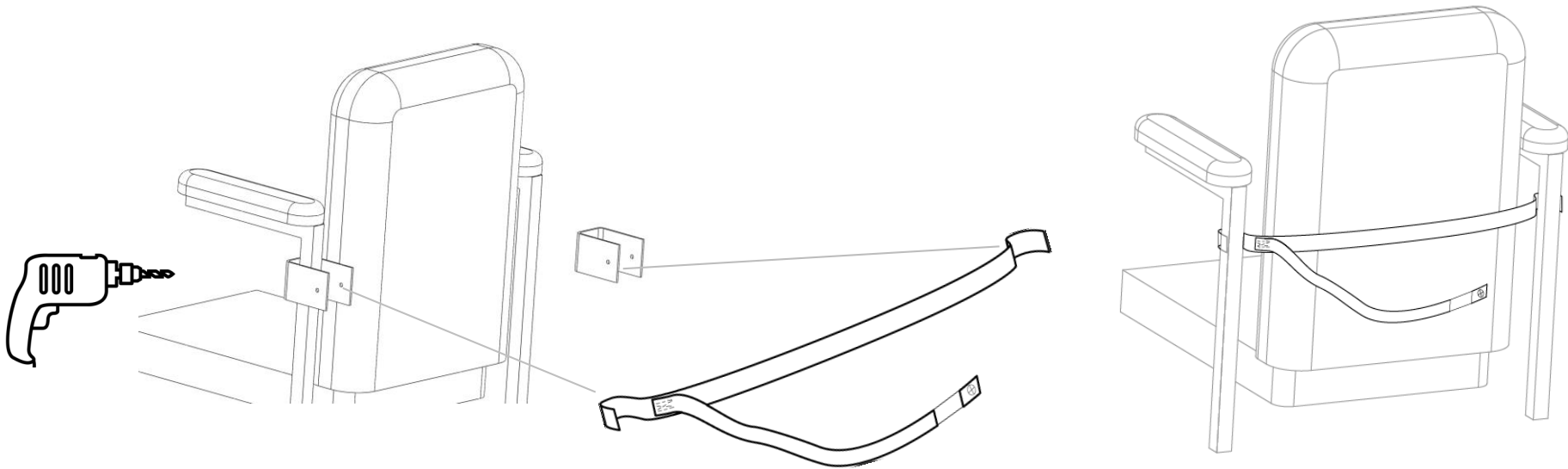
PVC

feedlock
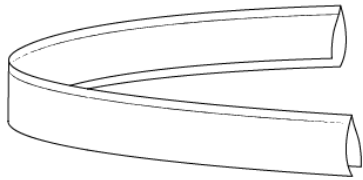
1

2

3,4

5. Bend both metal sheets to fit the handles of the scooter, and drill a hole for the bolts.

6. Connect the first strap to the scooter handles using the bended metal sheets.

7. Fit the ramp in the metal part of the carrier and secure the straps around the ramp.

8. Make sure that the ramp isn't higher than the seat of the scooter so the user doesn't get hurt.