



# Assembly

Assemble your Free Wheelchair Mission GEN 1 wheelchair.

Written By: Erica Solum



## INTRODUCTION

This guide will walk you through all the steps to correctly assemble the Free Wheelchair Mission GEN 1 wheelchair.

But first, familiarize yourself with tools you will be using with the [Free Wheelchair Mission Tools Maintenance Guide](#).

---

### TOOLS:

- 10mm Wrench (1)
- Large Needle Nose Pliers (1)
- Socket 19mm (1)

---

## Step 1 — Chair and Main Frame



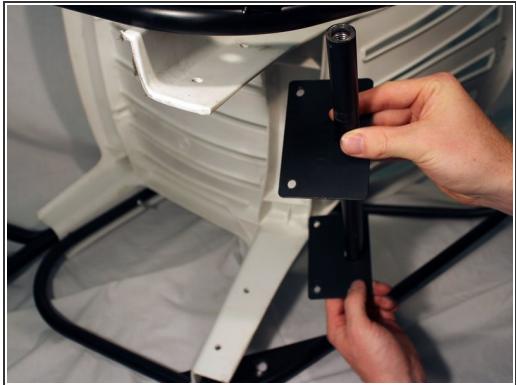
- Fit the lawn chair with the main frame by aligning the back of the lawn chair with the frame
  - ⓘ The chair should fit in easily
  - ⚡ Make sure the rear legs of the lawn chair are inside the frame and the back of front legs line up with the holes on the front of the frame

## Step 2 — Front Frame and Castor Wheels



- Line up one of the castor wheels with the holes on the front legs of the wheelchair and align the front frame with the castor wheels
- Make sure the guide knob on the castor wheel faces forward and the front frame fits perfectly with the guide knob
- Insert one long bolt through the top-most hole connecting the front frame, castor wheel, lawn chair, and main frame
- Using pliers and the 10mm wrench, securely fasten a nut to the bolt and repeat on the other side

## Step 3 — Axel and Axel Plates



- Slide both of the axle plates onto the axle
- Position each of the plates on the inside of each of the lawn chair legs
- Attach both of the plates to the chair by screwing in two screws to each plate
- Use the pliers to hold the nut while screwing in the screw with a 10mm wrench

## Step 4 — Rear Wheels



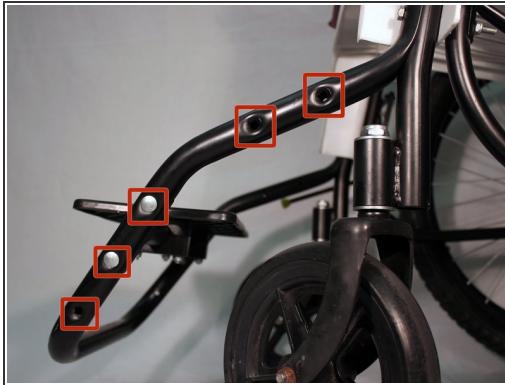
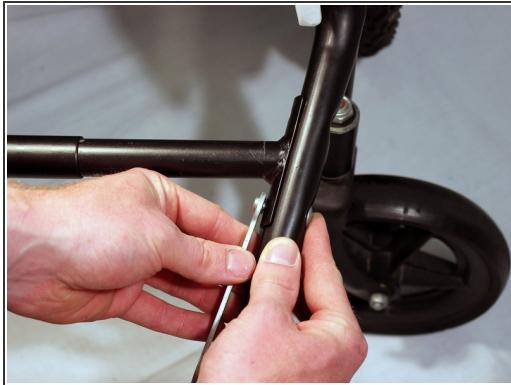
- Slide the 19mm axle bolt into one of the rear wheels and then hand-tighten the nut onto the bolt
- Insert the bolt into the axle so that the wheel is attached to the side of the frame
- Use the 19mm crescent wrench to hold the nut in place and use the socket wrench (or multi-purpose tool) to screw the axle into the frame

## Step 5 — Brakes



- Locate the both of the brakes and the four long screws
- Place the brake behind the front frame right above the castor wheels
  - *(i)* The brake with the yellow nob goes on the right side of the chair, and the brake with the black nob goes on the left
- Screw both of the screws into the bottom two holes in the frame using a 10mm wrench to hold the nut and the T-Wrench to fasten the screws
  - *(i)* You can use a power drill instead of a T-Wrench to speed up the process

## Step 6 — Footrest



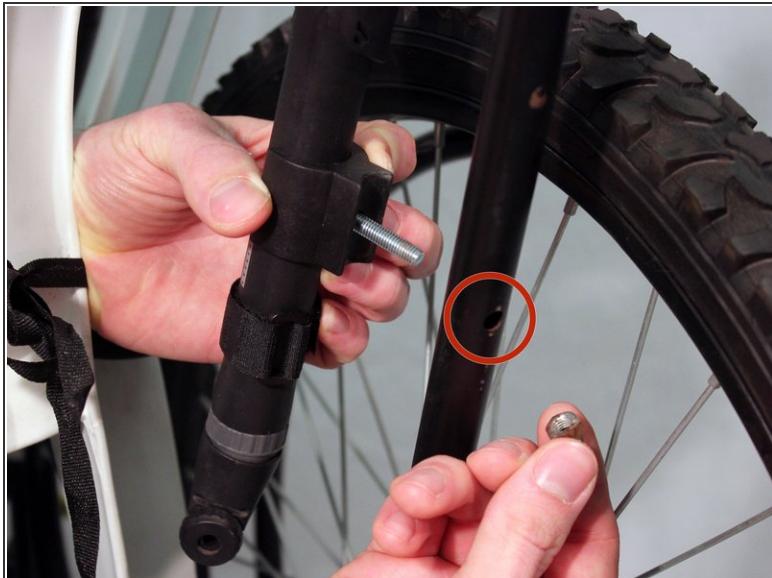
- Position the extendable footrest bar to the front frame at the desired height
- Make sure the two bolt holes on the footrest bar line up with two of the holes on the front frame
- *(i)* Pick the suitable position for the footrest that will complement the recipient (the position may be changed later)
- Using the 10mm wrench, secure the footrest bar to the front frame using the a flat-head bolt and nut pointing in towards the center of the wheelchair
- Attach the footrest to the footrest bar with the bottom of the footrest pointing upwards
- Match the footrest wedges up with the holes and attach the footrest to the front frame using 4 small bolts and tighten 4 small nuts onto the bolts using the 10mm wrench
- *(i)* The heads of the bolts should fit perfectly through the footrest

## Step 7 — Attach Cushion



- Place the cushion on top of the lawn chair seat and tie each of the 4 straps to the edge of the chair

## Step 8 — Hand Pump



- Using the final bolt and rounded nut, attach the hand pump to the back right side of the main frame next to the right rear wheel
- Secure the hand pump to frame using the 10mm wrench

To disassemble your device, follow these instructions in reverse order, or look at our teardown guide  
[Free Wheelchair Mission GEN 1 Teardown](#)