

Build Instructions: Treadmill



General Instructions

Part list: /treadmill/documentation/partlist.txt
Measurements for the parts are in directory:
/treadmill/design/drawings/

NOTE: The belt has a preferred direction of motion.
This is indicated on the side of the treadmill and the belt.



Frame

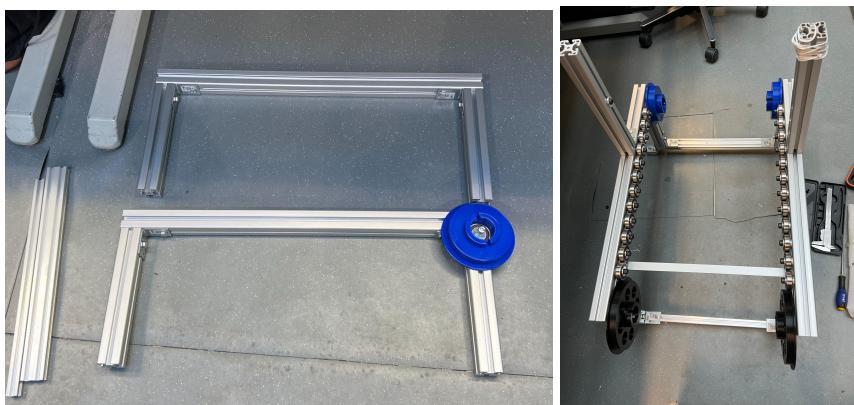


Figure 1: Legs connected to the top part (left) and complete frame (right)

The aluminum profiles are connected with connecting components and 16mm bolts. This build uses less expensive edge connection angle brackets that can be replaced with parts made for aluminum profiles in future modifications.

Bearings

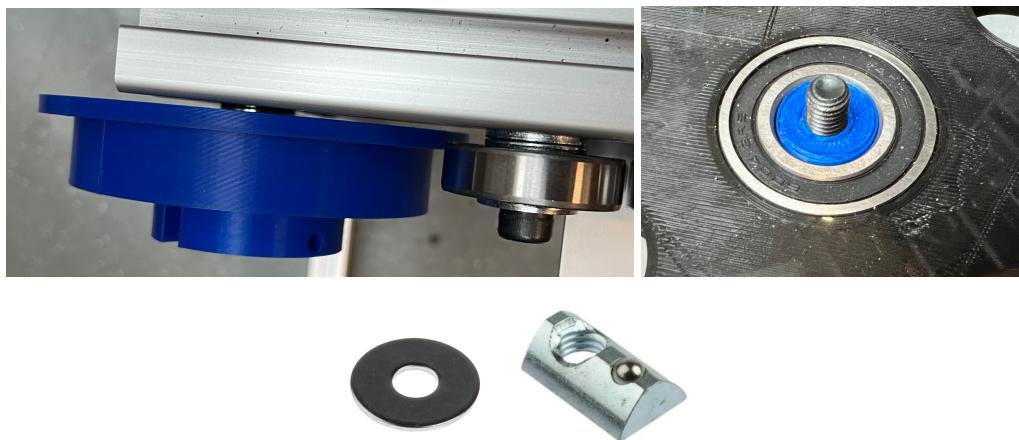


Figure 2: Blue roller with bearing inside and plain bearing connected to the frame (upper-left). Blue holder inside every bearing (upper-right). Washer (lower-left) and connecting component (lower-right).

Bearings and rollers have been slid to correct positions. The treadmill uses 28 bearings connected with bolts, connecting components, holders, and washers (see Figure 2). For spacing between the frame and bearing, two washers are used. However, holders use only one washer.

Belt



Figure 3: Wooden Planks are connected to the plastic PVC belt. A preferred direction of motion is marked to the side of the treadmill and the belt.

Treadmill planks are cut to 100x390mm pieces. Holes have been drilled with countersink from 50mm from the side. The plastic belt has to be wider than the planks. For this build width of the belt is selected to be 395mm.