AndyMark Mecanum Wheel Assembly Instructions

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Parts to make one (1) Mecanum Wheel:

- A: side plate (2)
- B: molded roller (12) with black core and two inserted bushings
- C: brass tube (12)
- D: 1.60” long aluminum spacer (6)
- E: #10-32 x 3.0 inch long screw (18)
- F: #10-32 Nylock nut (18)
- G: 1/4” stainless steel washer (24), 0.04” thick

Tools needed:

- 5/32” hex head driver (or allen wrench)
- 3/8” wrench (or socket)
- Cordless drill, set on low torque setting

Wheel Assembly Instructions:

Step 1: Lay one side plate (A) down on the table; with inside face (inside sticker is on one side of plate). Feed screw (E) from bottom up through perimeter hole. Put washer (G) onto screw (E), over plate.

Step 1

Step 2

Step 2: Insert brass tube (C) into roller (B), repeat for all rollers

Step 3: Put roller (B) onto screw (E). Put washer (G) onto screw (E), on top of roller (B). Place the washer so that the brass tube is inside the inner hole of the washer.

Step 3

Step 3

Step 4: Place second side plate (A) inside down onto wheel assembly. The “inside” of the plates should face each other.

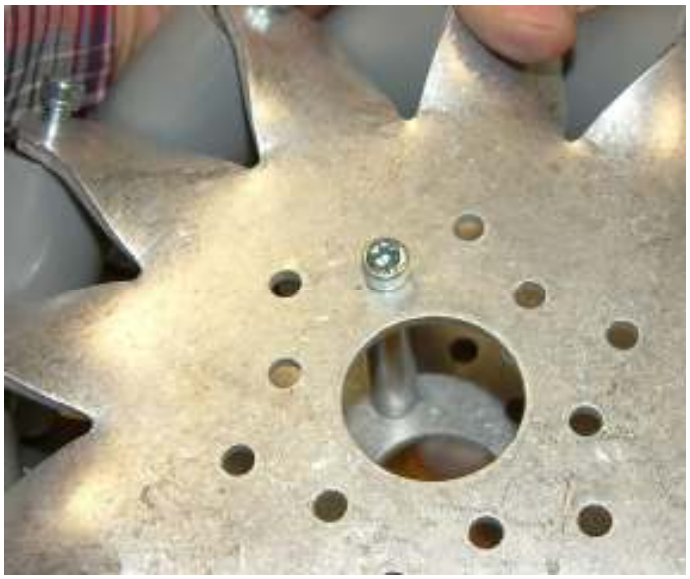
Step 4

Step 4

Step 5: Install nuts (F) on each of the 12 axle screws, but leave them only finger-tight.

Step 6: Place the aluminum spacer (D) between the plates, aligning the spacer on one of the 6 holes closest to the center bore. Insert a screw (E) through the side plate holes and the spacer, keeping sure that the screw head is on the same side as the screw heads of the axle screws.

Step 5



Step 6

Step 7: Insert screws (E) into the 6 interior holes, with each going through a spacer (D).

Step 8: Use the 3/8 wrench and a 5/32 hex driver (or allen wrench), tighten six interior screws first, in a balanced way. Tighten the perimeter screws, keeping the washers fitted over the brass tubes and not sandwiched between the tube and the side plate.

Step 9

Step 10

Here is how the plates and the ends of the rollers should look when finished and tight: