

Strummer: Pulley Side

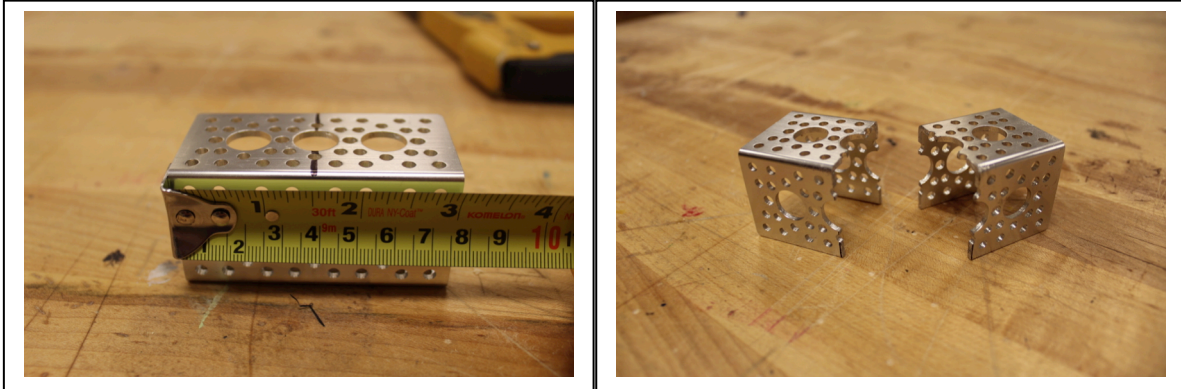
In this section, you will build half of the strumming system. This half contains the pulley that will ensure a tight belt.

Bill of Materials:

Name	Number
3" Aluminum Channel	1
90 Degree Single Angle Bracket	1
90 Degree Flat Pattern Bracket A	1
1/2" Bore Bottom Tapped Clamping Hub	2
6-32 Socket Head Screw 1/4"	2
6-32 Socket Head Screw 1/2"	10
6-32 Socket Head Screw 1"	4
6-32 Nylon Nuts	16
8mm Face Tapped Clamping Mount	2
16 Tooth Pinion Pulley	1
Flanged Ball Bearing	2
Clamping Shaft Collar 1/4"	2
12mm Hole Adaptor	2
6mm Precession Shaft	1

Tools
Hacksaw
Marker
Tape Measure
Hex Keys
Wrench 8mm
Mini Screwdriver

Step 1:

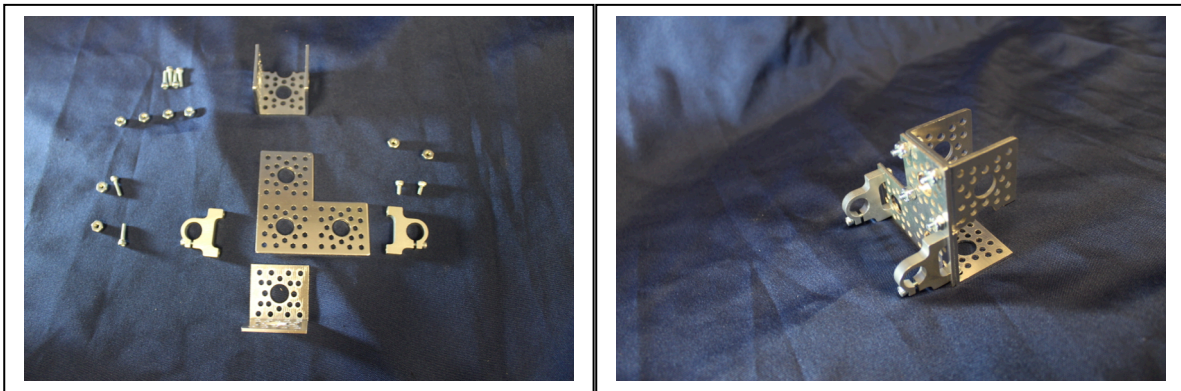


Need:

- 1x 3" Aluminum Channel

Take the 3" channel. Measure and mark exactly halfway along the it (1.5"). Use a hacksaw to cut along this line.

Step 2:

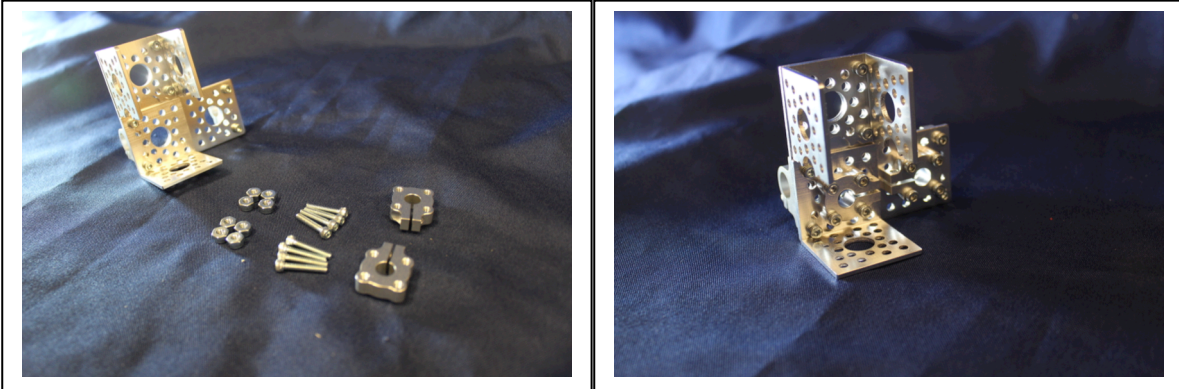


Need:

- 1x 1.5" Aluminum Channel
- 1x 90 Degree Single Angle Bracket
- 1x 90 Degree Flat Pattern Bracket A
- 2x 1/2" Bore Bottom Tapped Clamping Hub
- 2x 6-32 Socket Head Screw 1/4"
- 6x 6-32 Socket Head Screw 1/2"
- 8x 6-32 Nylon Nuts

Take the bracket and hold it as an L in front of you. Place the angled bracket so that one side is flat on the ground and the other is in the corner of the L. Place 2 of the 1/2" screws through the angle connecting to the clamping hub. Attach the cut channel so that it is perpendicular to the angle bracket and attach to the other clamping hub to the far right of the L.

Step 3:

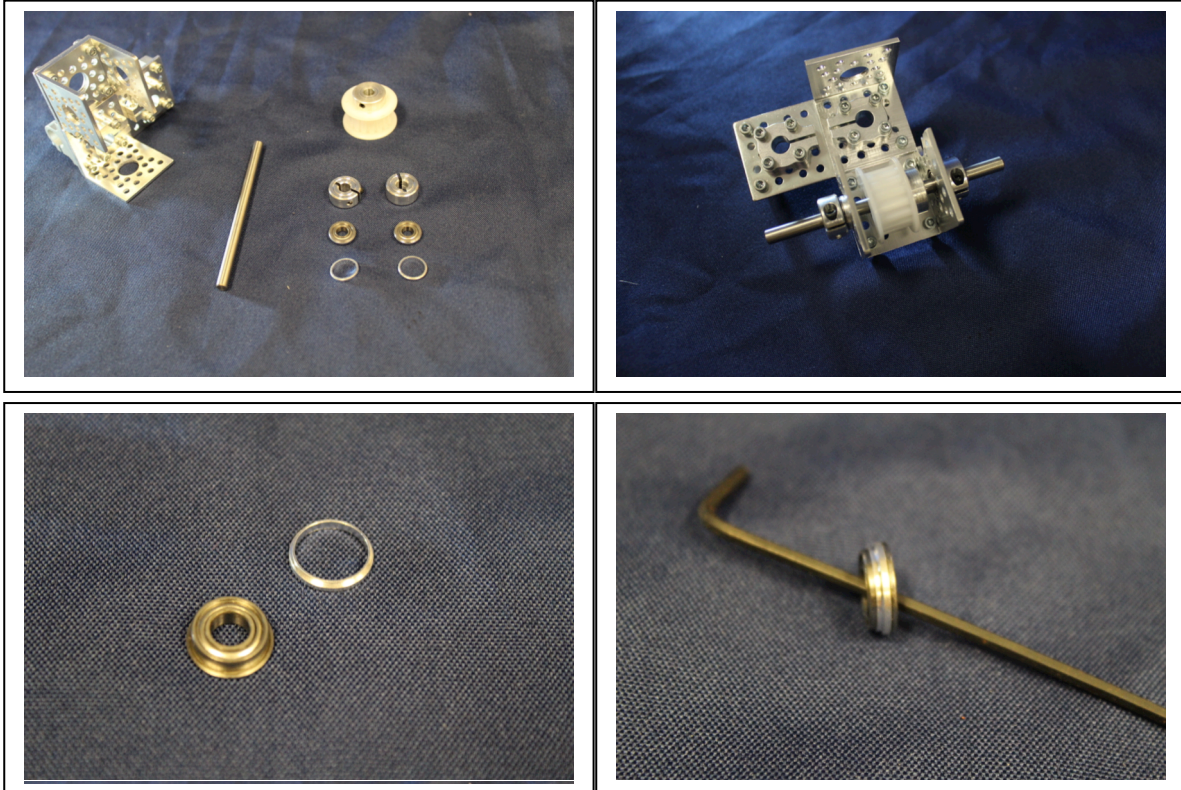


Need:

- 2x 8mm Face Tapped Clamping Mount
- 4x 6-32 Socket Head Screw 1/2"
- 4x 6-32 Socket Head Screw 1"
- 8x 6-32 Nylon Nuts

The extrusion of the clamping mounts will slot into the two bottom-most holes of the "L" shaped bracket. Then face the tightening mechanism of them toward the center. Again, the longer screws will go through both plates and the shorter screws will go through just the L flat pattern.

Step 4:



Need:

- 1x 16 Tooth Pinion Pulley
- 2x Flanged Ball Bearing
- 2x Clamping Shaft Collar (1/4")
- 2x 12mm Hole Adapter
- 1x 6mm Precision Shaft

As seen in the lower two images, place the hole adapter onto the ball bearing. These assemblies then slot into the outside of the holes of the channel bracket. Then insert the shaft through one of them and slot the pulley in the middle of the bracket. Once the pulley is centered tighten a shaft collar on both sides of the shaft.