

## Strummer: MotorSide

In this section, you will be assembling half of the strumming structure. This half contains the motor that drives the pick across the strings.

## Bill of Materials:

| Name                                     | Number |
|--|--------|
| 6-32 Socket Head Screw ¼"                | 4      |
| 6-32 Socket Head Screw ½"                | 8      |
| 6-32 Socket Head Screw 1"                | 4      |
| 6-32 Nylon Nuts                          | 10     |
| 90 Degree Single Angle Bracket           | 1      |
| 90 Degree Flat Pattern Bracket A         | 1      |
| ½" Bore Bottom Tapped Clamping Mount     | 2      |
| 8mm Face Tapped Clamping Hub             | 2      |
| 32mm Bore Bottomed Tapped Clamping Mount | 1      |
| Micro Switch Mount                       | 1      |
| Micro Switch                             | 1      |
| Micro Switch Screw                       | 2      |
| White Wire (4 ft)                        | 1      |
| Blue Wire (4 ft)                         | 1      |

| Tools          |
|----------------|
| Hex Keys       |
| Wire Cutter    |
| Wire Stripper  |
| Soldering Iron |
| Solder         |

## Step 1:



Need:

- 1x 90 Degree Single Angle Bracket
- 1x 90 Degree Flat Pattern Bracket A
- 2x ½" Bore Bottom Tapped Clamping Hub
- 2x 6-32 Socket Head Screw ¼"
- 2x 6-32 Socket Head Screw ½"

Holding the Flat Pattern Bracket as an "L" place the degree bracket so it is pointing toward you. Then Place the Clamping Hubs on the back of this L so that they are aligned with the bottom vertical edges. The longer screws will go through both plates.

## Step 2:

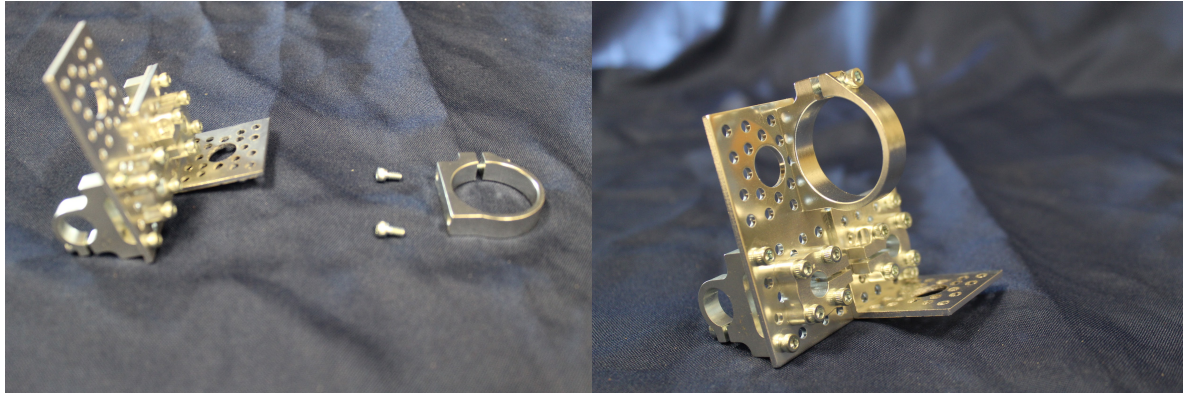


Need:

- 2x 8mm Face Tapped Clamping Mount
- 4x 6-32 Socket Head Screw ½"
- 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.

### Step 3:

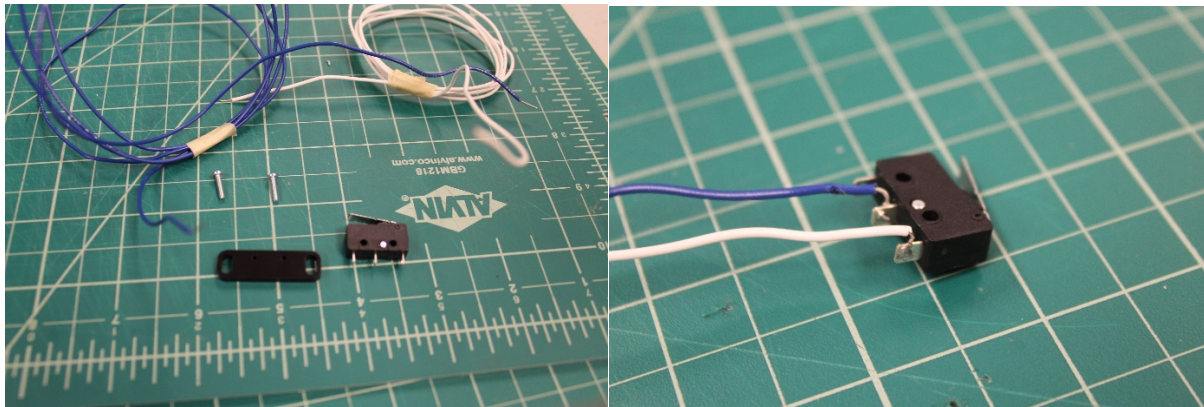


Need:

- 2x 6-32 Socket Head Screw 1/4"
- 1x 32mm Bore Bottomed Tapped Clamping Mount

Take the clamping mount and attach it to the frame at the inside top of the 'L' part of the bracket.

### Step 4:

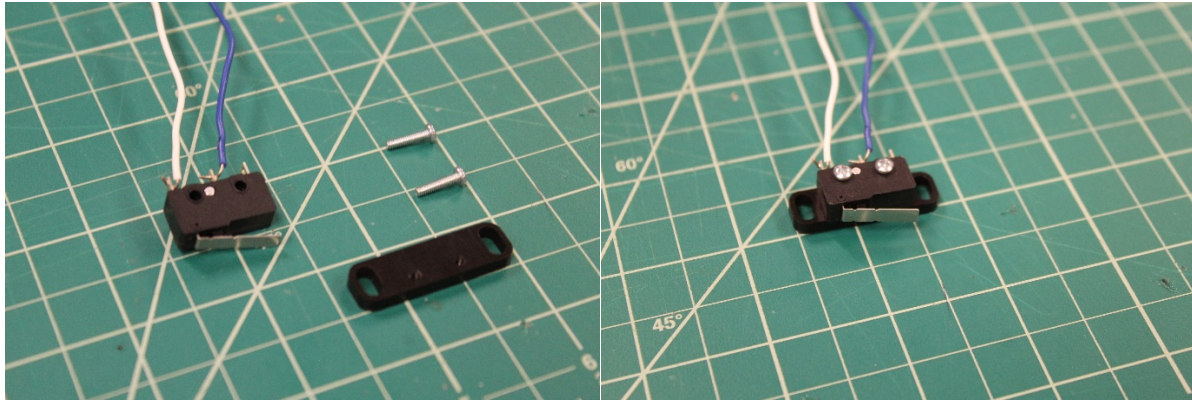


Need:

- 1x Micro Switch
- 1x White Wire
- 1x Blue Wire

Solder the white wire to the hinge side of the micro switch, labeled and the blue to the middle section.

### Step 5:

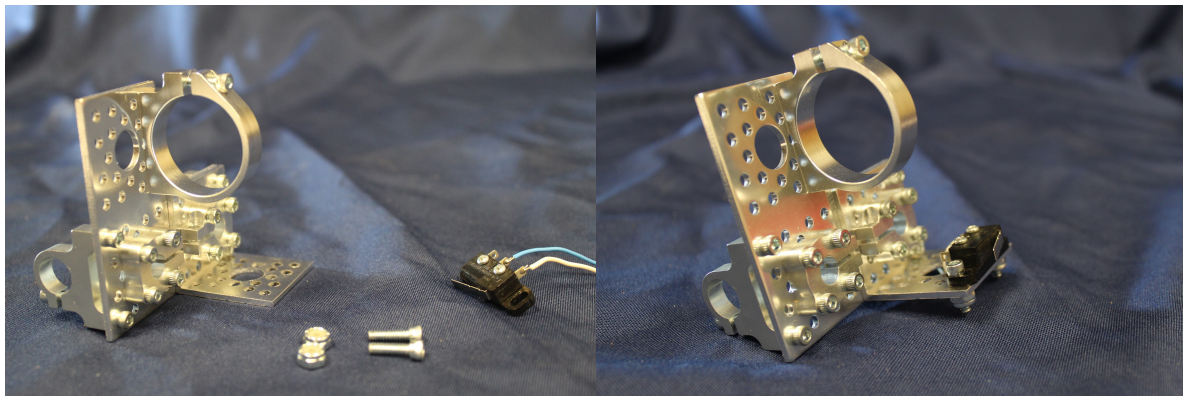


Need:

- 2x Micro Switch Screw 1/4"
- 1x Micro Switch Mount

Align the switch and mount so that the holes are aligned and the edges are parallel. Screw together using the screws provided with the micro switch.

### Step 6:

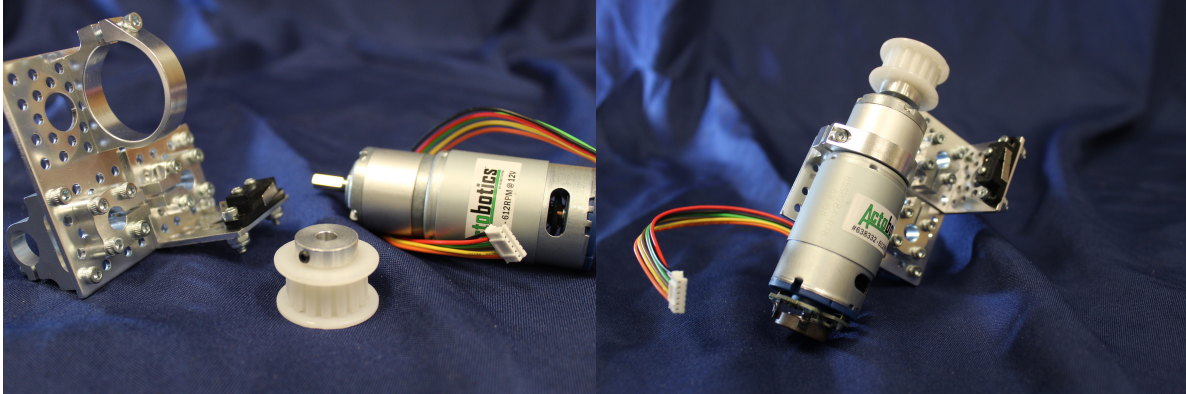


Need:

- 1x Assembled Micro Switch
- 2x 6-32 Socket Head Screw 1/2"
- 2x 6-32 Nylon Nuts

Take the assembled micro switch and attach it to the outermost edge of the angled bracket.

## Step 7:



Need:

- 1x DC Motor with Encoder

Align the switch and mount so that the holes are aligned and the edges are parallel. Screw together using the screws provided with the micro switch.