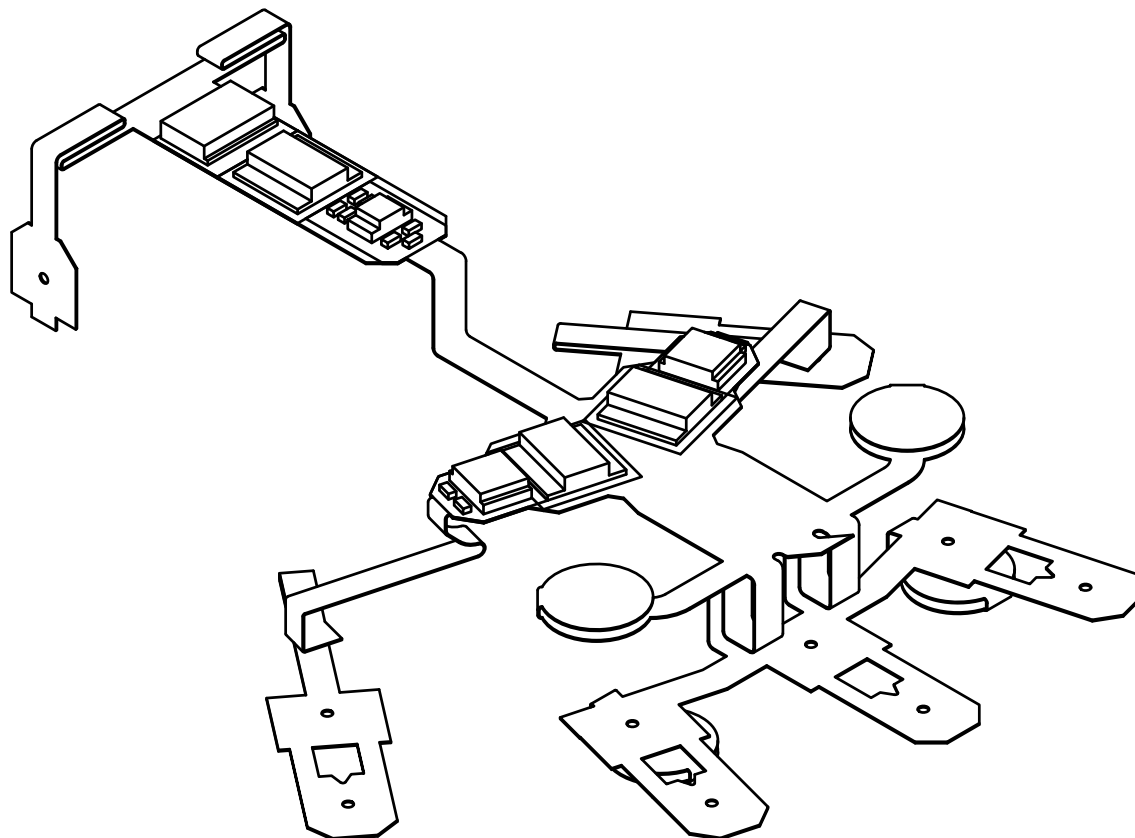
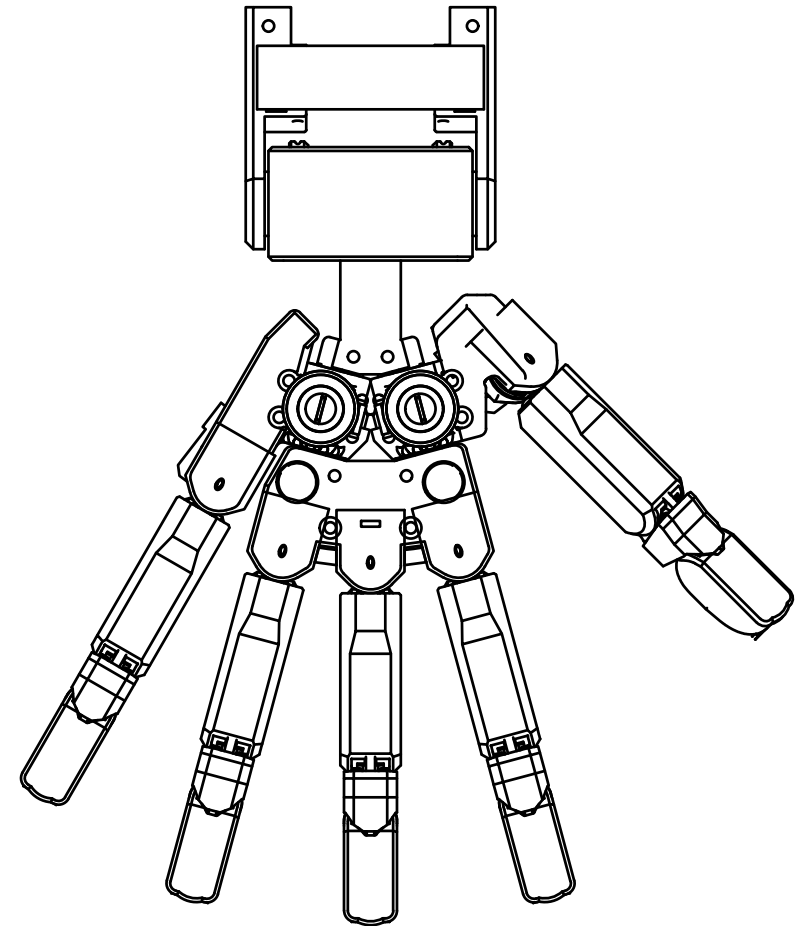
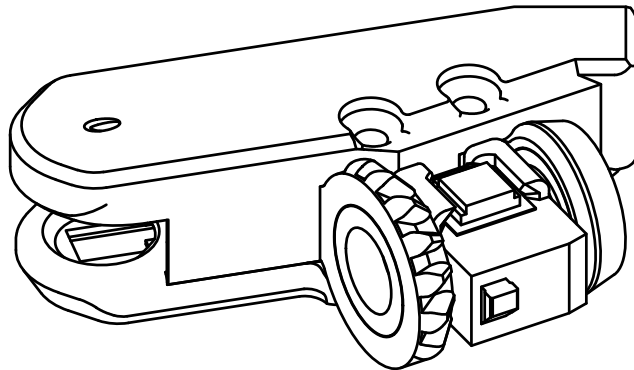
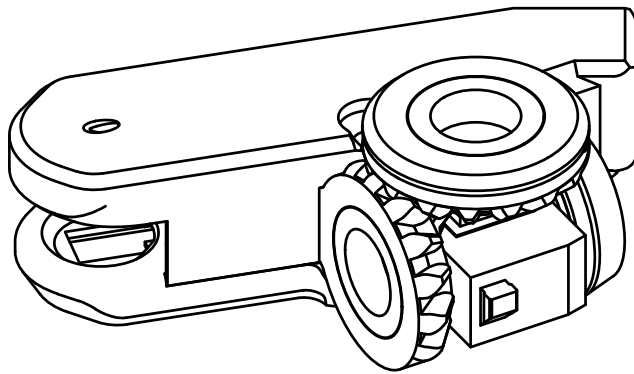


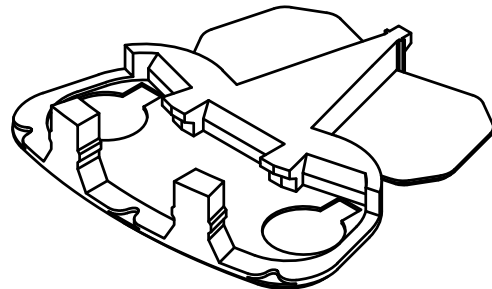
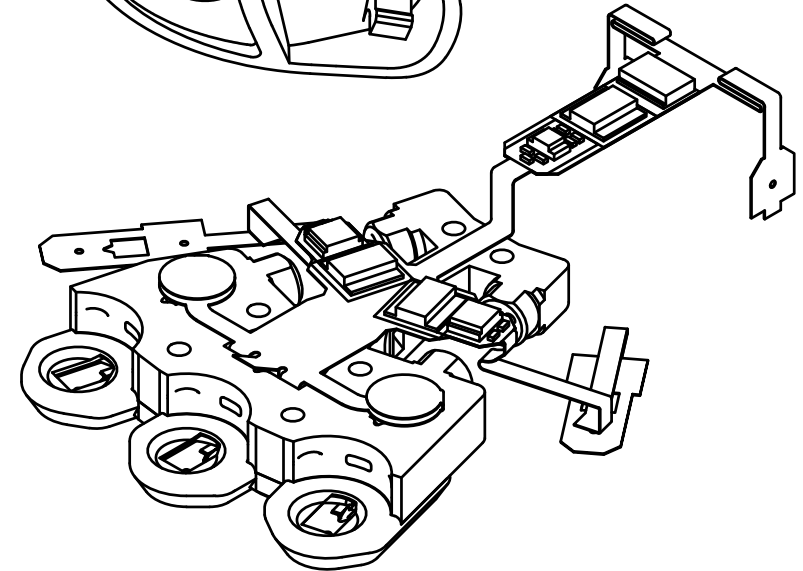
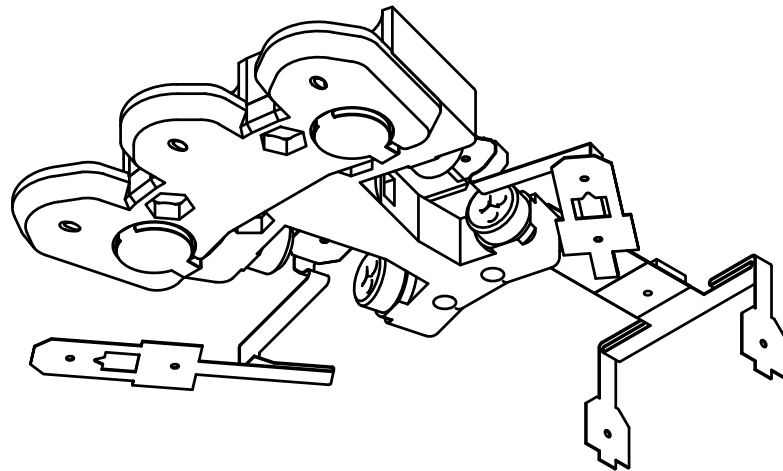
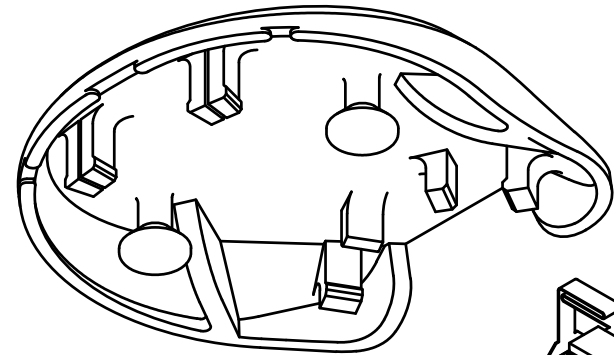
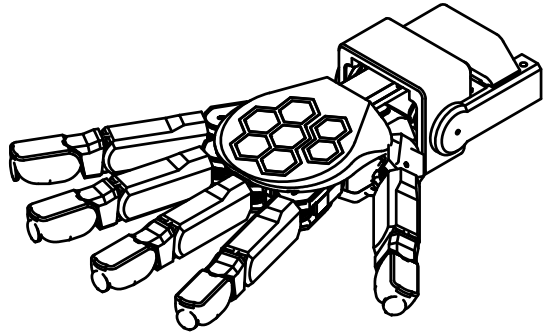
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Title  Palm Overview				DWG Name  Palm Circuits	
				Rev.  2	Date of issue  2022-07-26



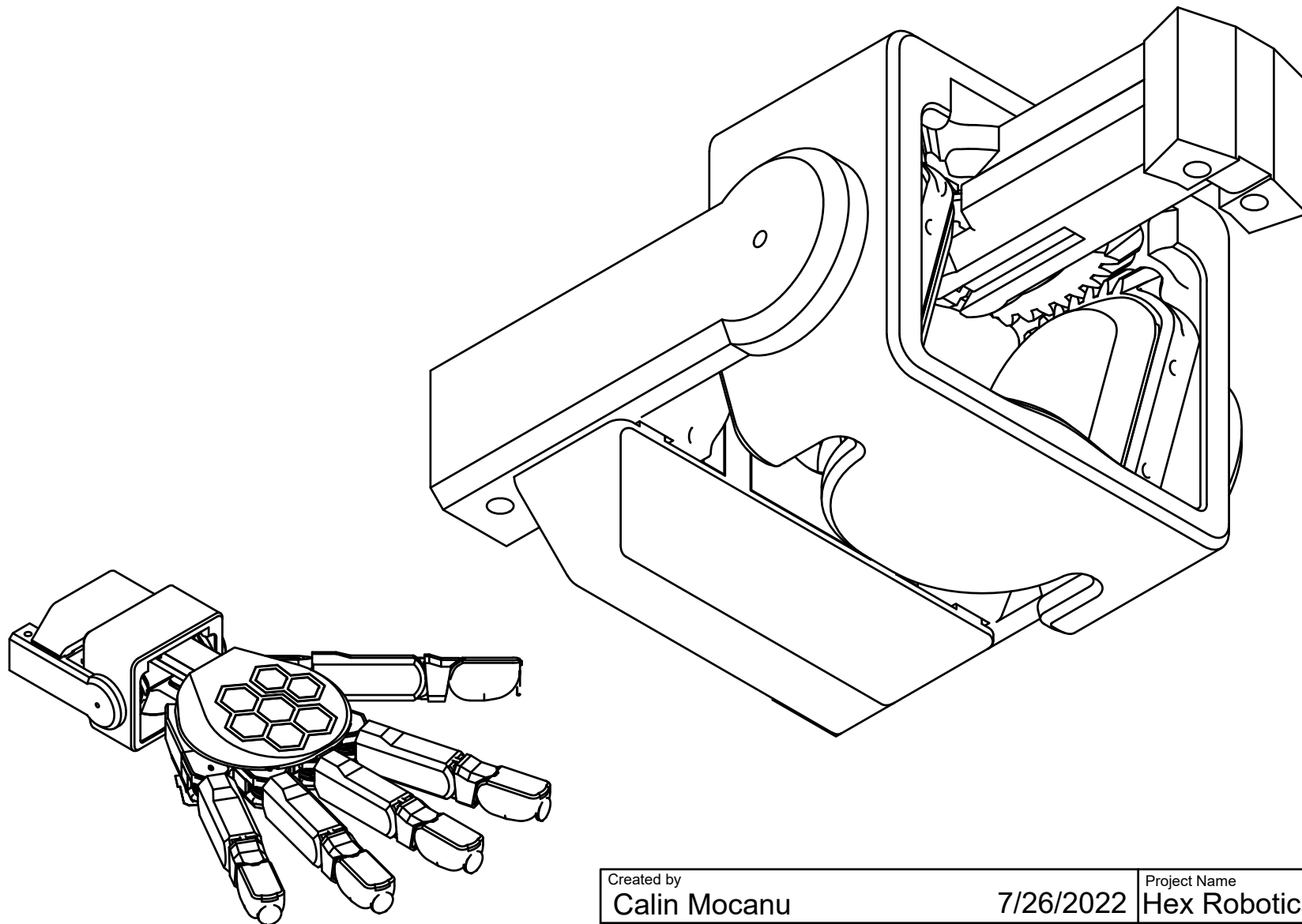
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Title Pivot Joints				DWG Name Palm Circuits	
				Rev. 2	Date of issue 2022-07-26



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Title  Palm Force Sensors				DWG Name  Palm Circuits	
				Rev.  2	Date of issue  2022-07-26



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Title Wrist Differential Joint				DWG Name Palm Circuits	
Rev. 2		Date of issue 2022-07-26		Sheet 5/8	

Clip with rotation sensor that measures position of bevel gear with respect to side bracket.

Rotational position encoder, circuit leads up (not shown in closeup)

Insert keeps circuit and rotation encoder in place

Bevel gear with just 7-11 teeth

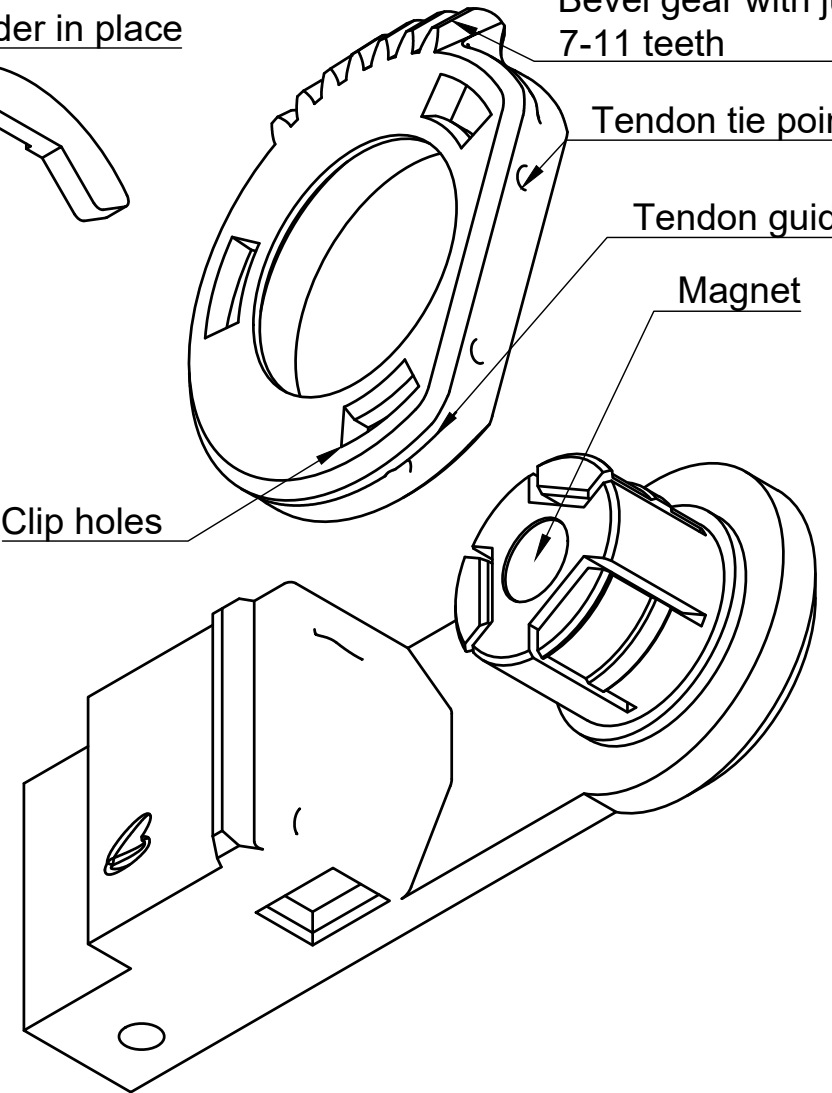
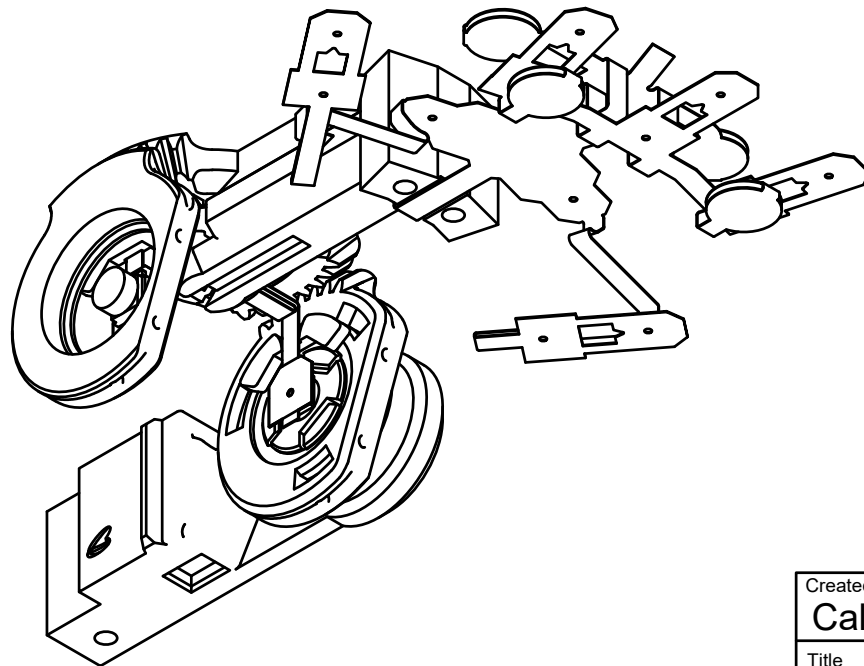
Tendon tie points

Tendon guide

Magnet

Clip hooks

Clip holes



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Hex Robotics

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Wrist Differential Detail

DWG Name

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Rev.

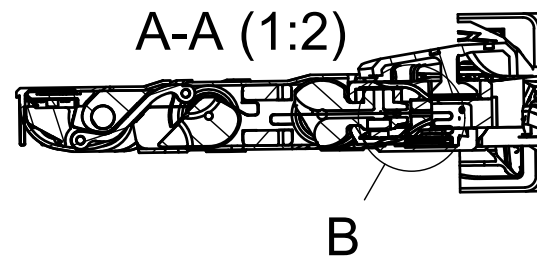
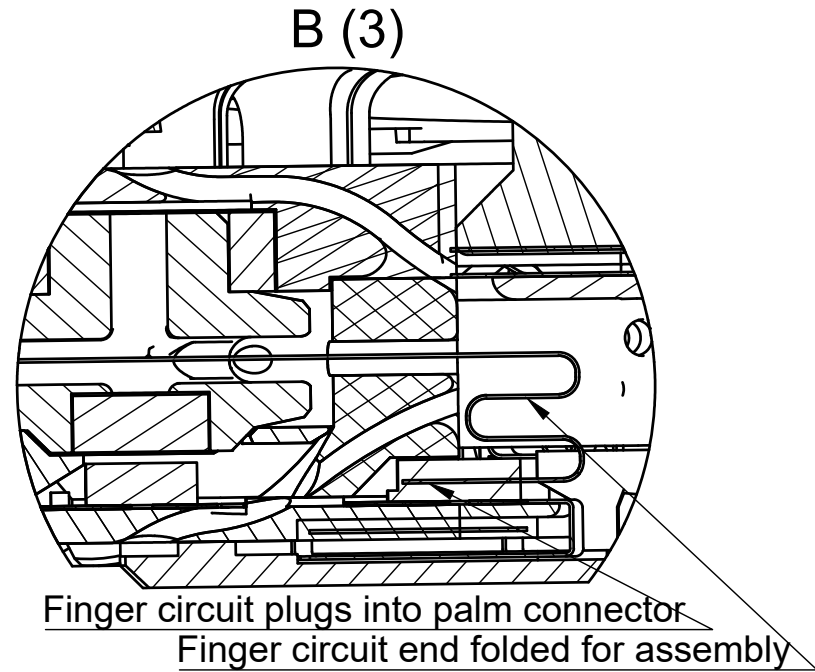
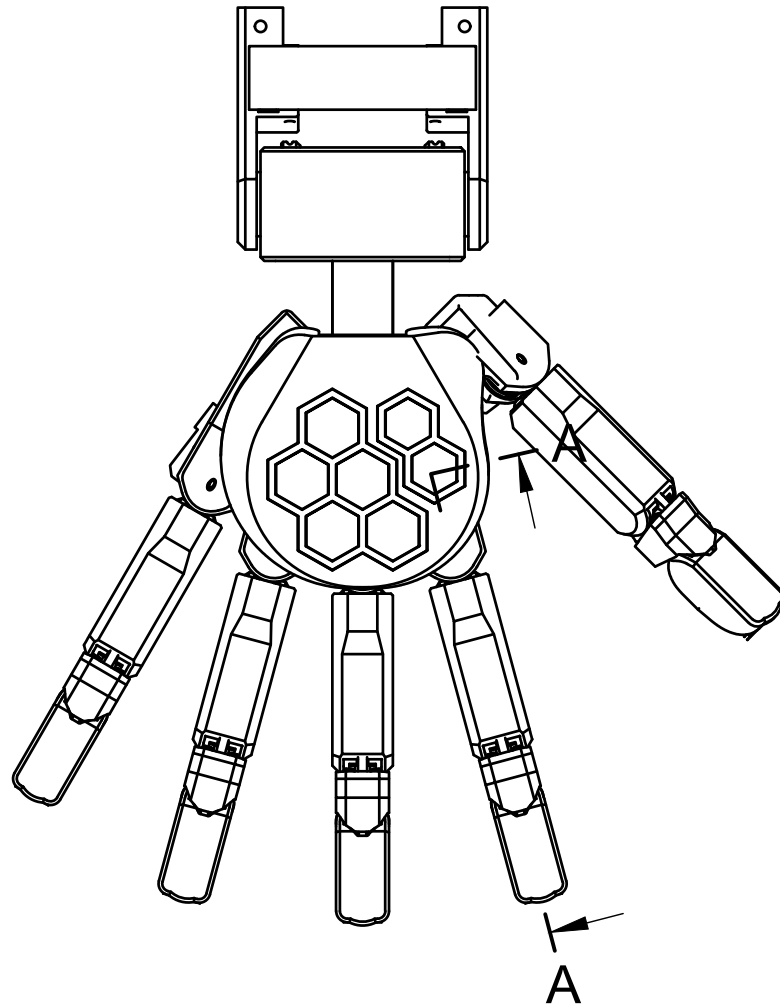
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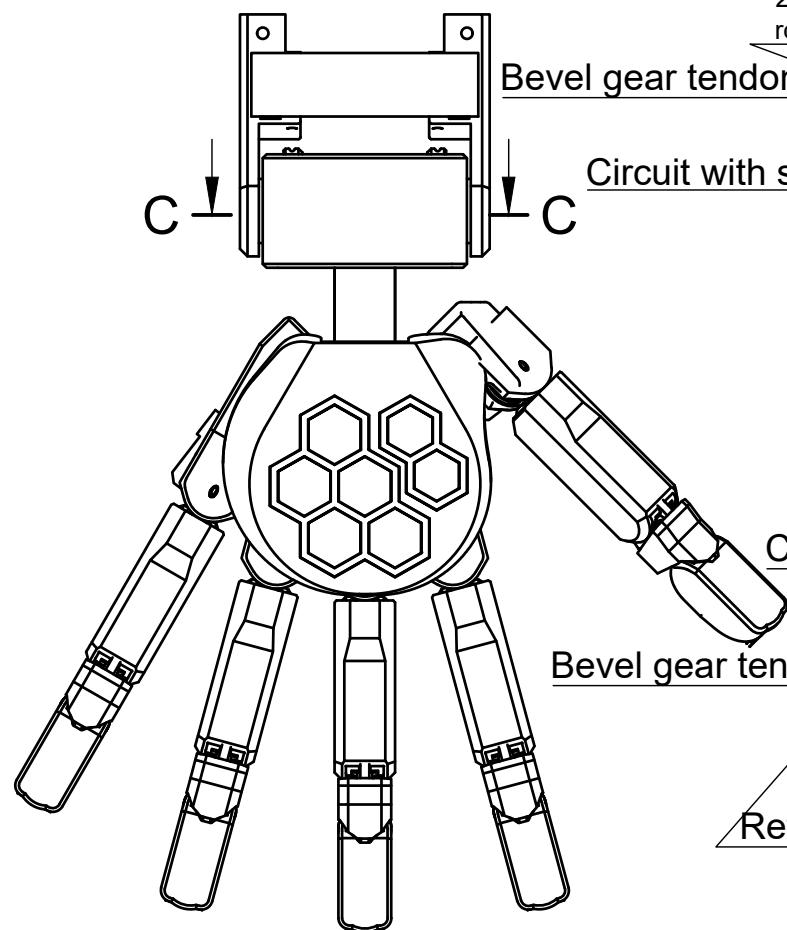
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Title  Finger circuit plugin palm				DWG Name  Palm Circuits	
				Rev.  2	Date of issue  2022-07-26



Bevel gear meshes with top central gear.

1. When the bevel gears on either side rotate opposite each other the top gear also rotates, causing yaw motion.
2. When bevel gears rotate together, the whole mechanism rotates, pitching the palm up or down.

C-C (1.5)

Yaw bearings

Bevel gear bearing

Roll bearings

Bevel gear tendon channel

Circuit with strain relief fold

Clip section

Bevel gear tendon guide

U-joint crossshaft. Connects the roll bearings to the yaw bearings.

Hole in the middle of wrist for tendons.

Side brackets mount into forearm

Reference magnet (rigidly connected to forearm)

Rotational Position Encoder clipped into side bevel gear.

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Project Name

Hex Robotics

Title

Wrist Differential Section

DWG Name

Palm Circuits

Rev.

2

Date of issue

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