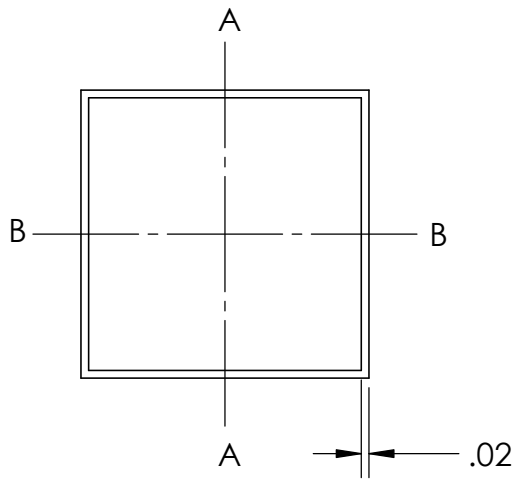

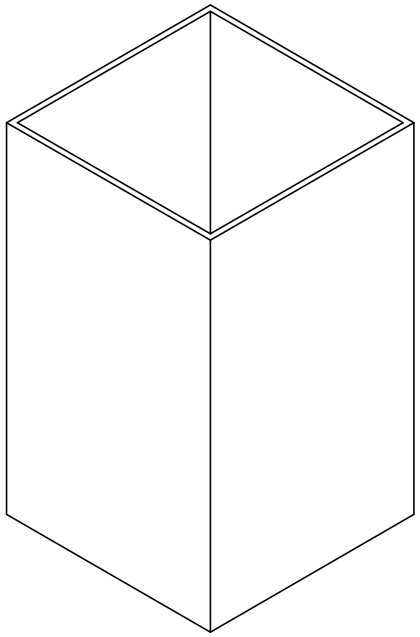

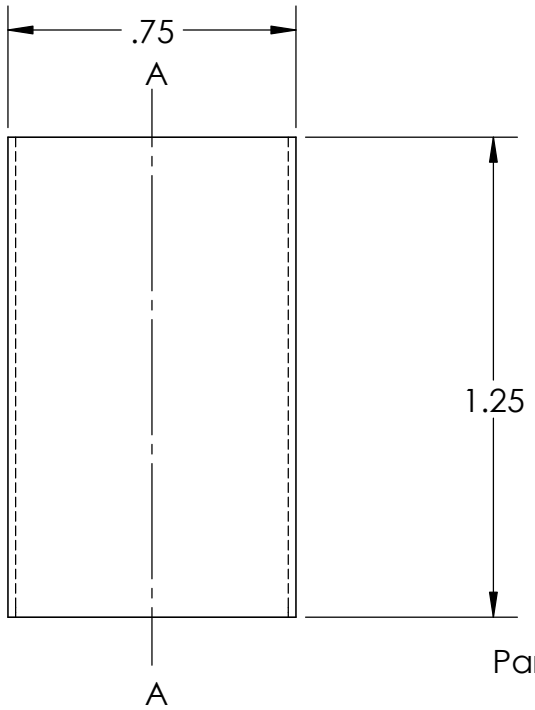

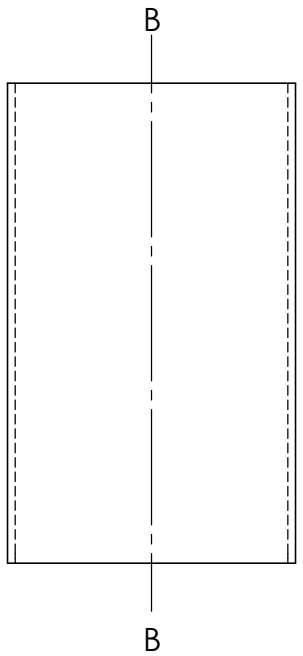

Part is symmetric about planes A-A and B-B.

The Ohio State University First Year Engineering	Dwg. Title: CDS COVER	Inst.:CLINGAN	Scale: 1:2	Dwg. No.: 1
	Drawn Bv: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/16/22

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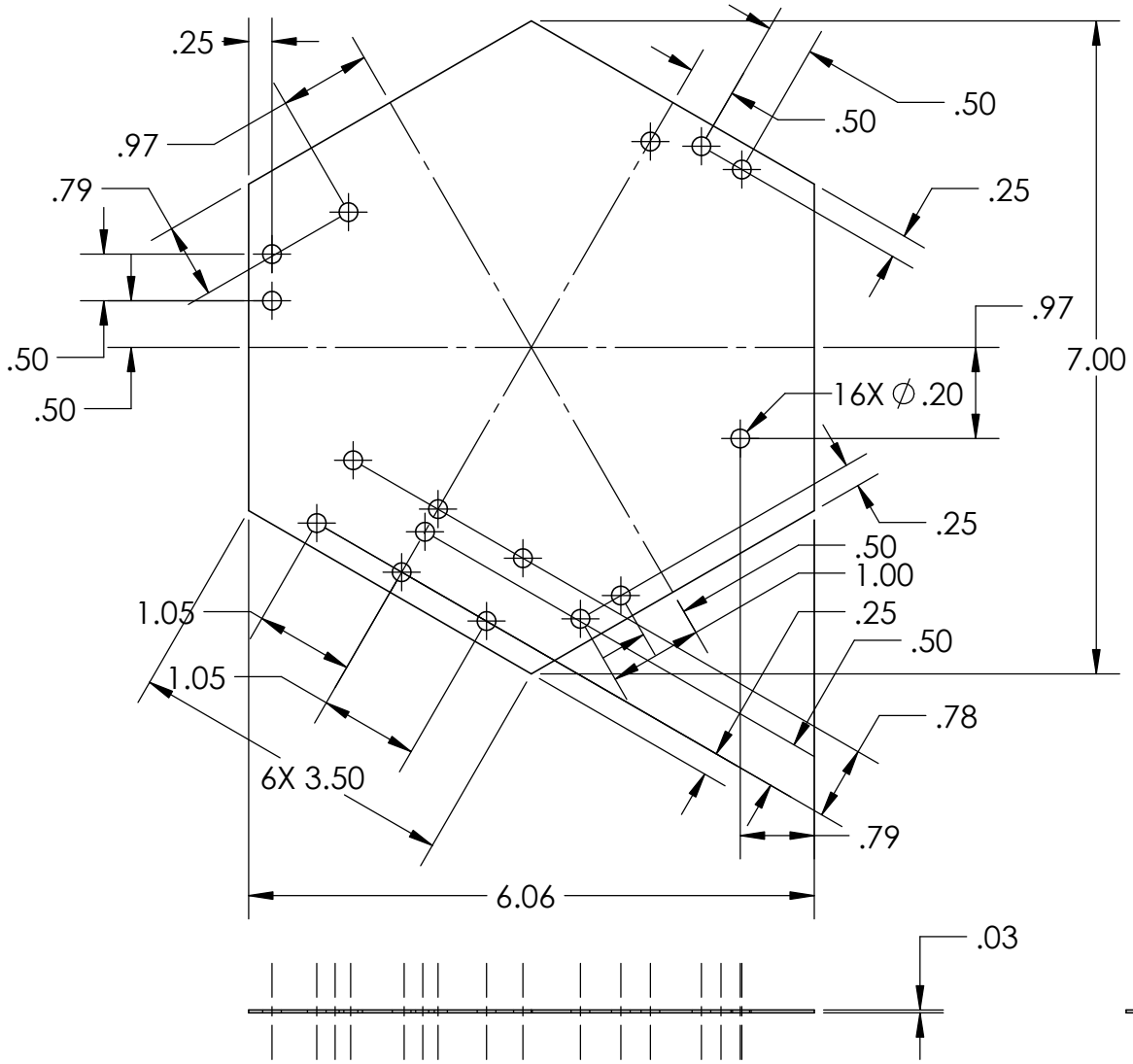

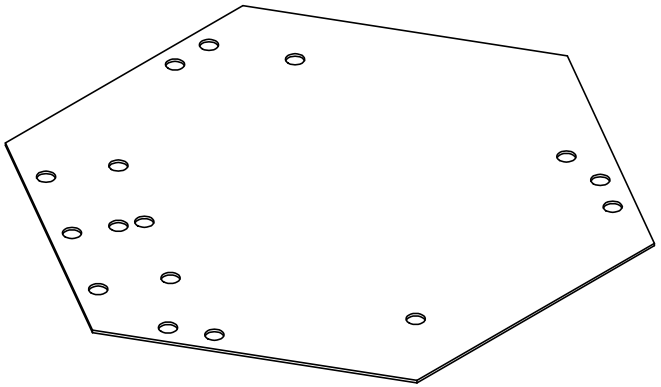

All measurements are relative to the sides of the hexagon and the centerlines between sides.
All sides of the hexagon are the same length.
Part is made from 20 gauge aluminum sheet.

The Ohio State University First Year Engineering	Dwg. Title: OMNI-HEX-BASE	Inst.:CLINGAN	Scale: 1:2	Dwg. No.: 2
	Drawn Bv: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/14/22

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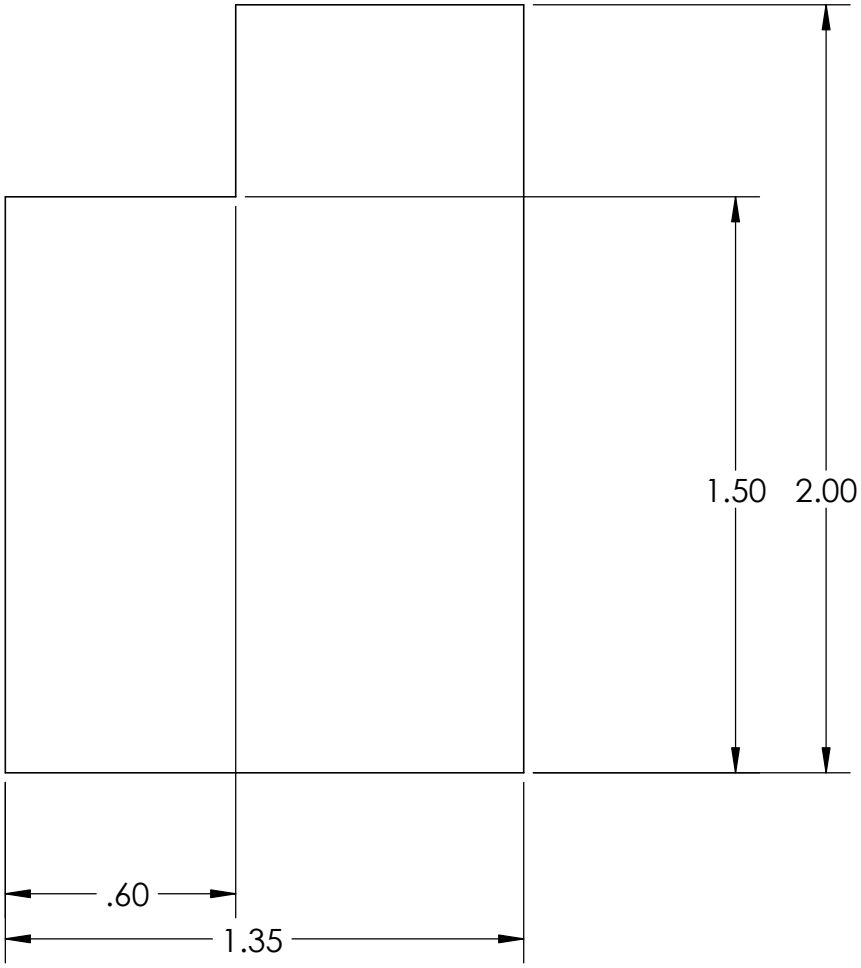

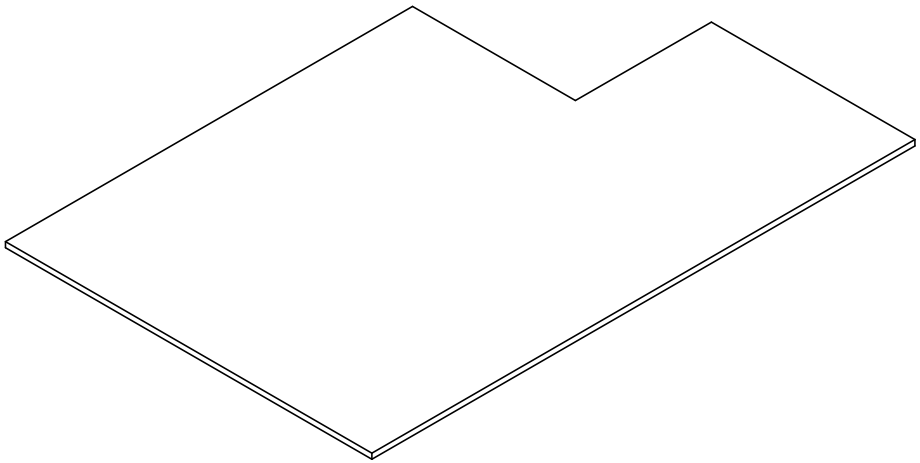

The Ohio State University First Year Engineering	Dwg. Title: HOOK BASE	Inst.:CLINGAN	Scale: 2:1	Dwg. No.: 3
	Drawn Bv: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/16/22

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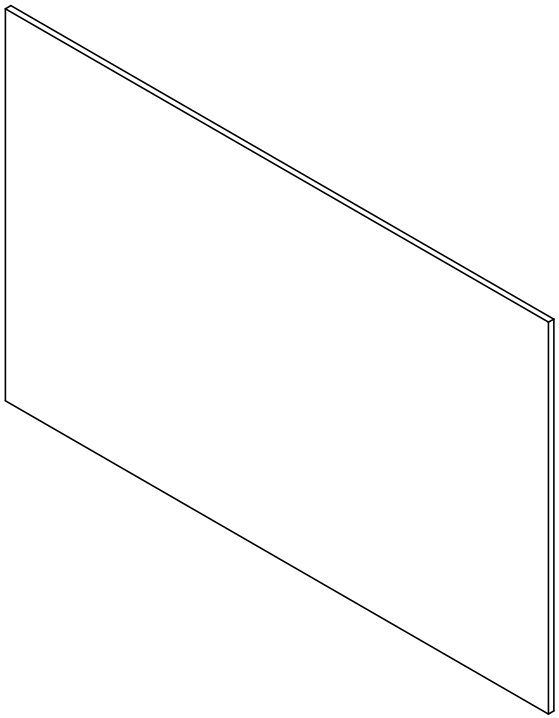

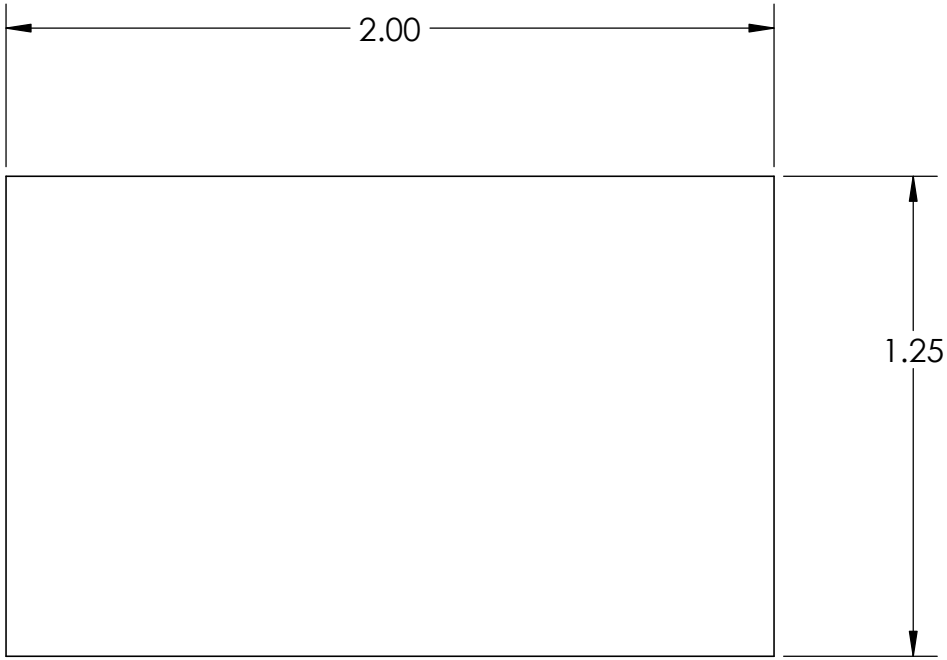

The Ohio State University First Year Engineering	Dwg. Title: HOOK RAMP	Inst.:CLINGAN	Scale: 2:1	Dwg. No.: 4
	Drawn Bv: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/16/22

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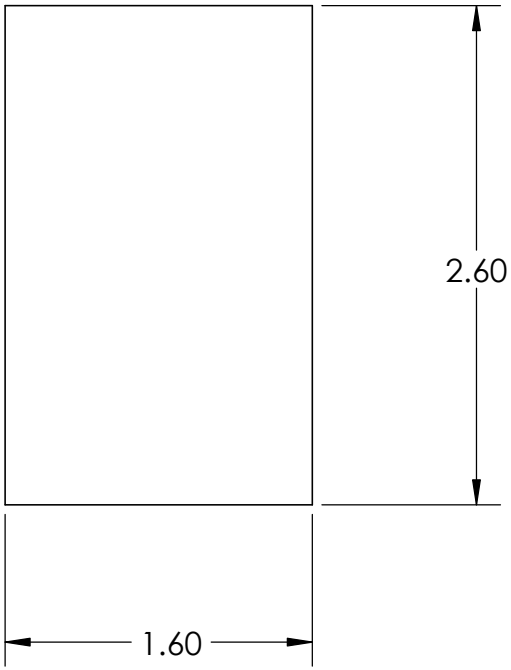

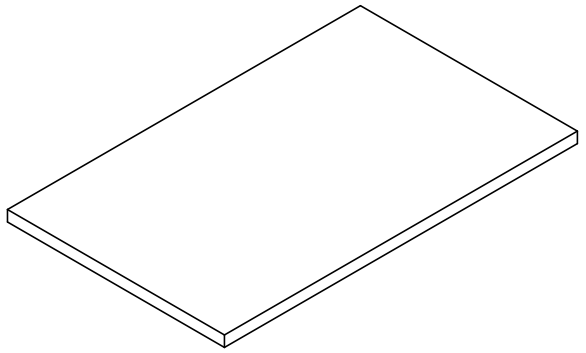

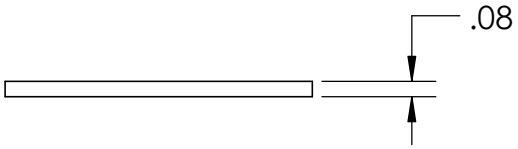

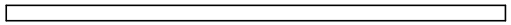

The Ohio State University First Year Engineering	Dwg. Title: PLANE	Inst.:CLINGAN	Scale: 1:1	Dwg. No.: 5
	Drawn Bv: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/15/22

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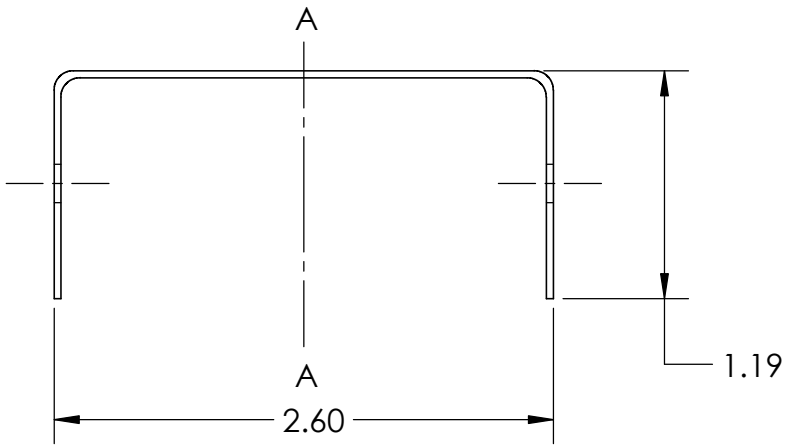

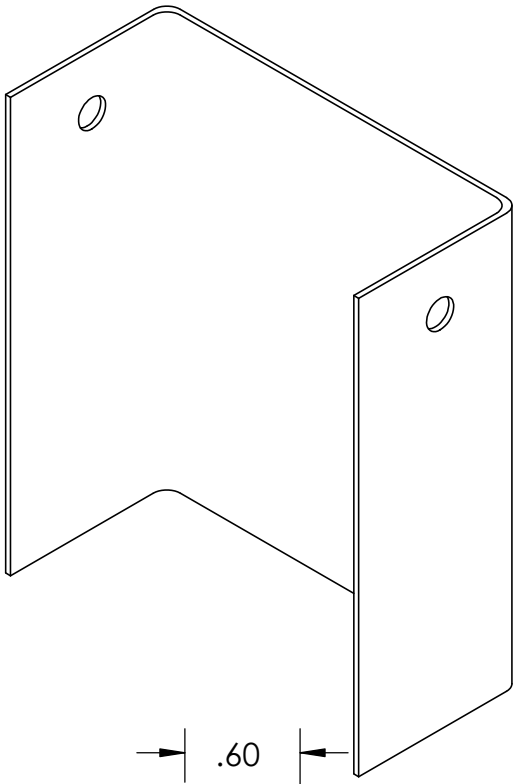

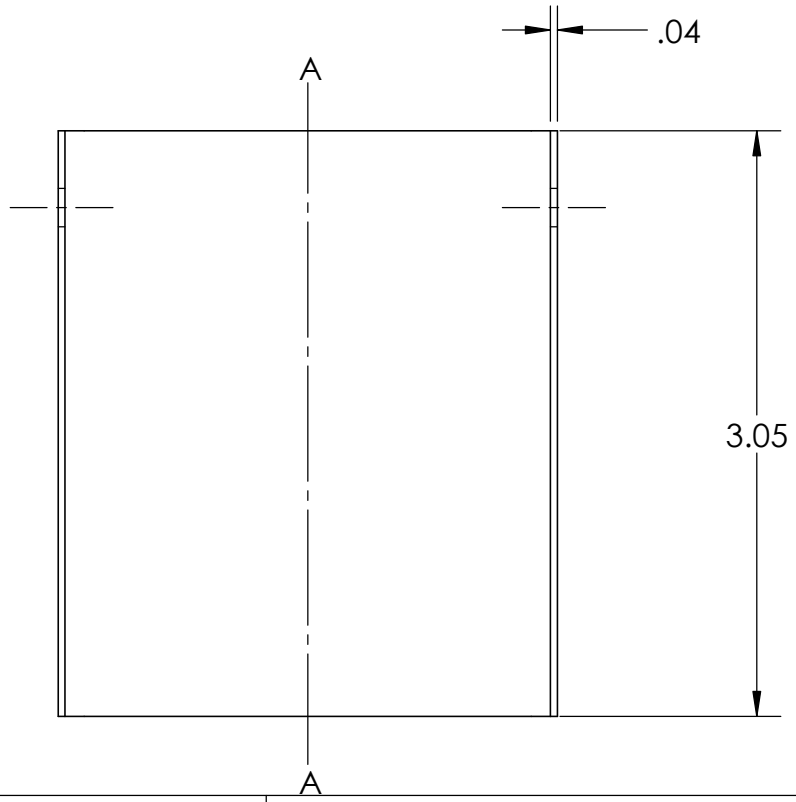

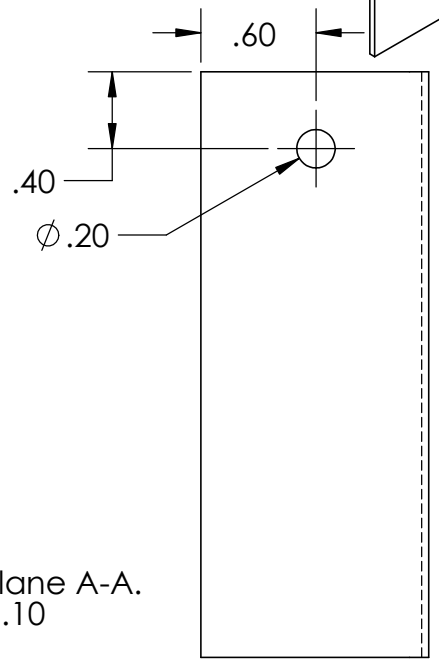

Part is symmetric about plane A-A.
All fillets and rounds are R.10

The Ohio State University First Year Engineering	Dwg. Title: RAMP	Inst.:CLINGAN	Scale: 1:1	Dwg. No.: 6
	Drawn Bv: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/14/22

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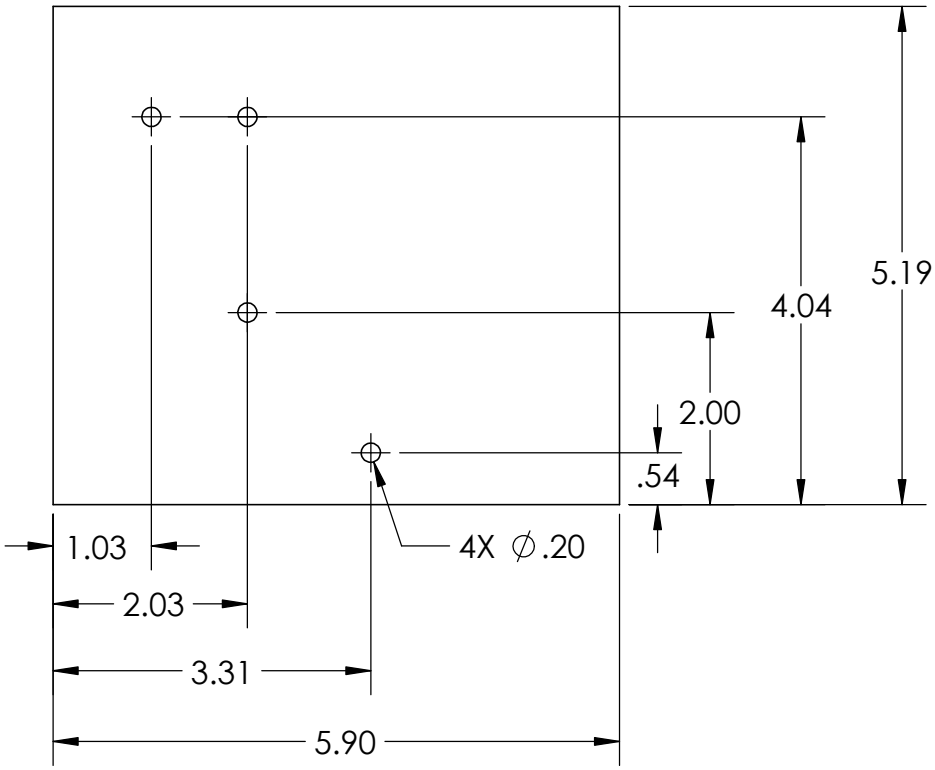

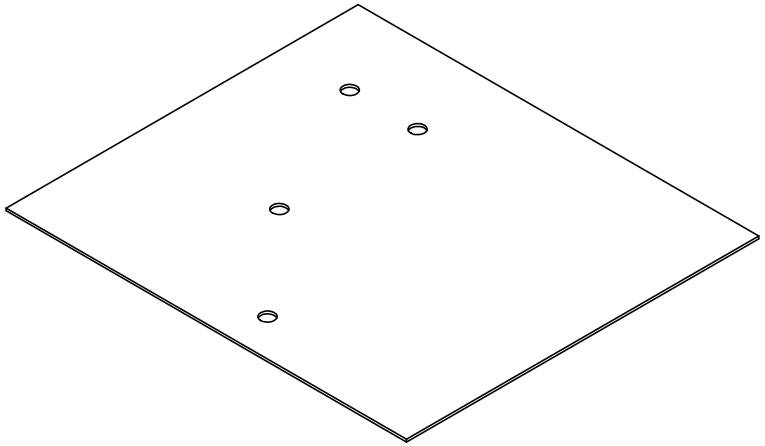

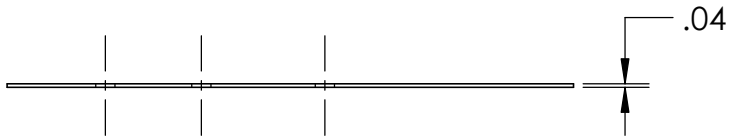

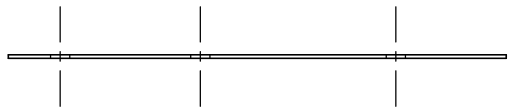

The Ohio State University First Year Engineering	Dwg. Title: UPPER BASE	Inst.:CLINGAN	Scale: 1:2	Dwg. No.: 7
	Drawn Bv: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/16/22

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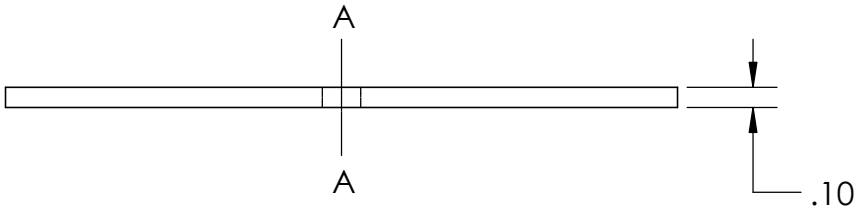

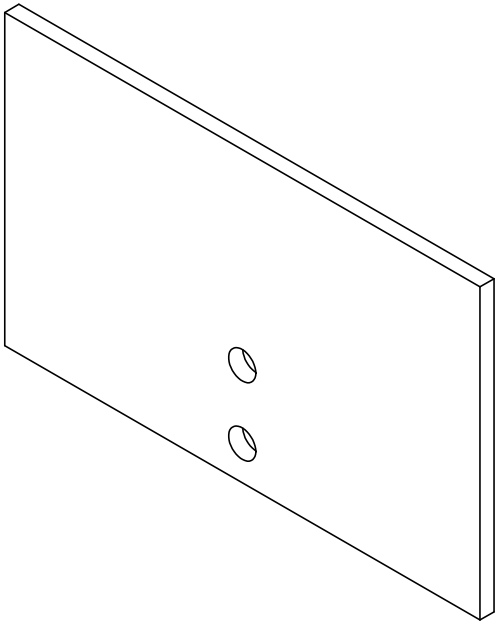

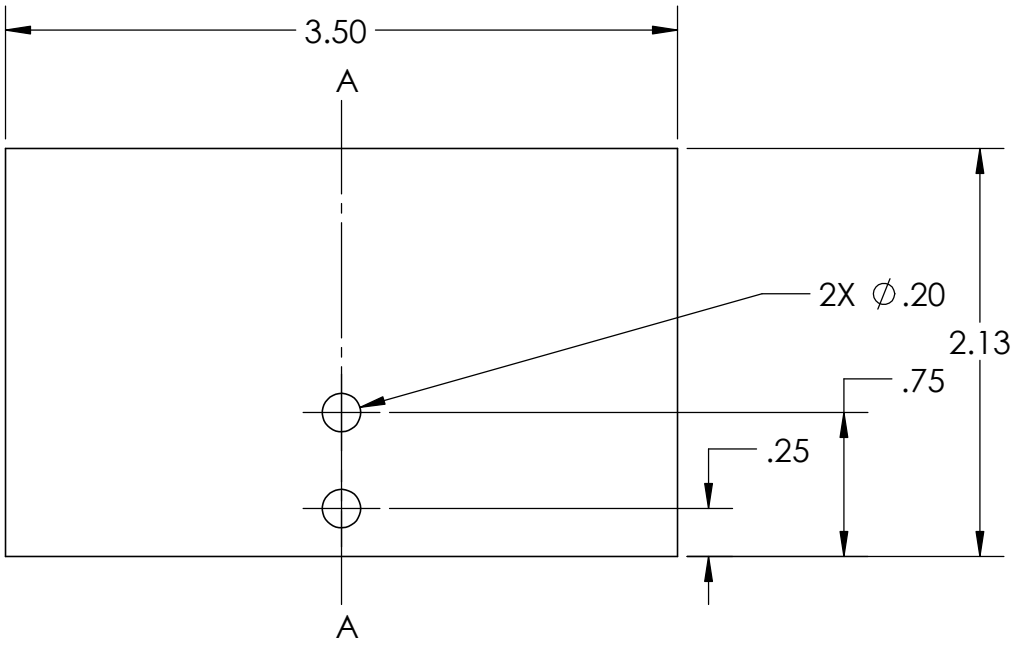

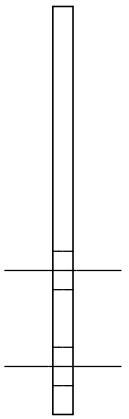

Part is symmetric about plane A-A.

The Ohio State University First Year Engineering	Dwg. Title: SIDEWALL	Inst.: CLINGAN	Scale: 1:1	Dwg. No.: 8
	Drawn By: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/14/22

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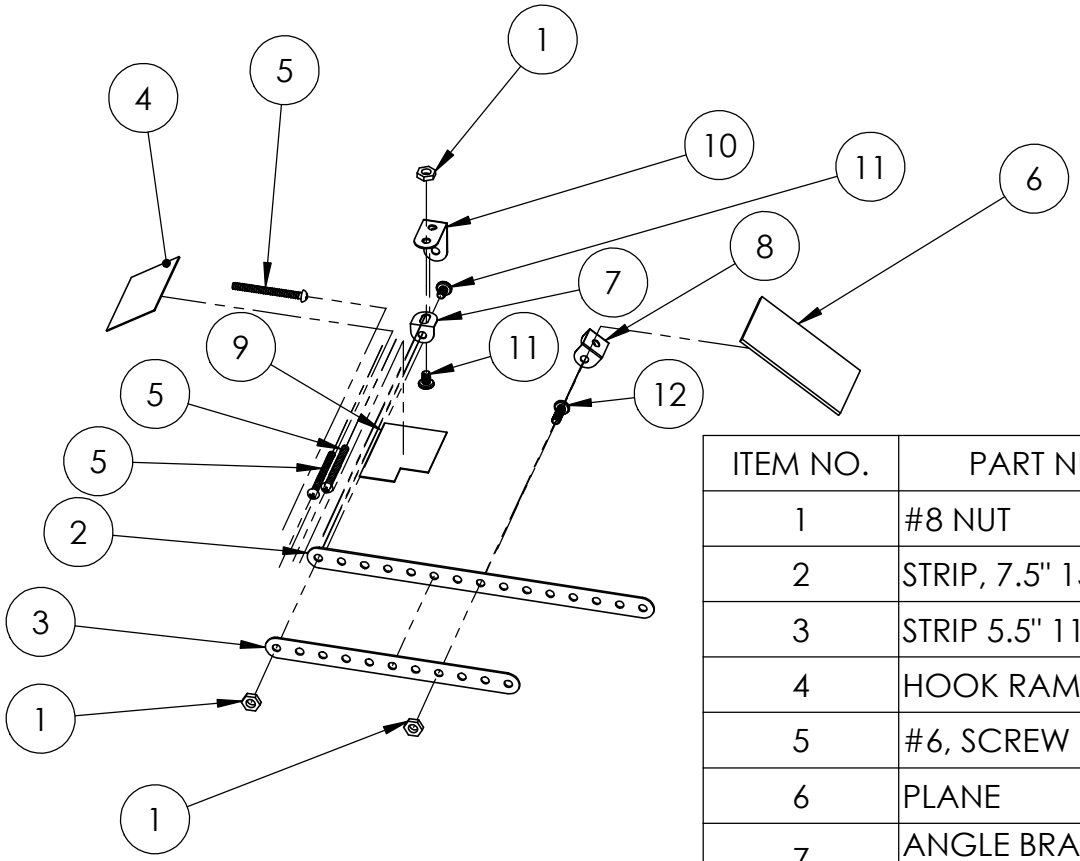

ITEM NO.	PART NUMBER	MATERIAL	QTY.
1	#8 NUT		3
2	STRIP, 7.5" 15 HOLE		1
3	STRIP 5.5" 11 HOLE		1
4	HOOK RAMP	CARDBOARD	1
5	#6, SCREW 1.5"		3
6	PLANE	ALUMINUM	1
7	ANGLE BRACKET, .5x.5" 1x1 HOLE		1
8	DOUBLE BRACKET, .5x.5" 1x1x1 HOLE		1
9	HOOK BASE	CARDBOARD	1
10	ANGLE BRACKET, 1x1" 2x2 HOLE		1
11	#8 SCREW, 0.25"		2
12	#8 SCREW, .5"		1

The Ohio State University First Year Engineering	Dwg. Title: ROBOT ARM	Inst.:CLINGAN	Scale: 1:4	Dwg. No.: 9
	Drawn Bv: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/18/22

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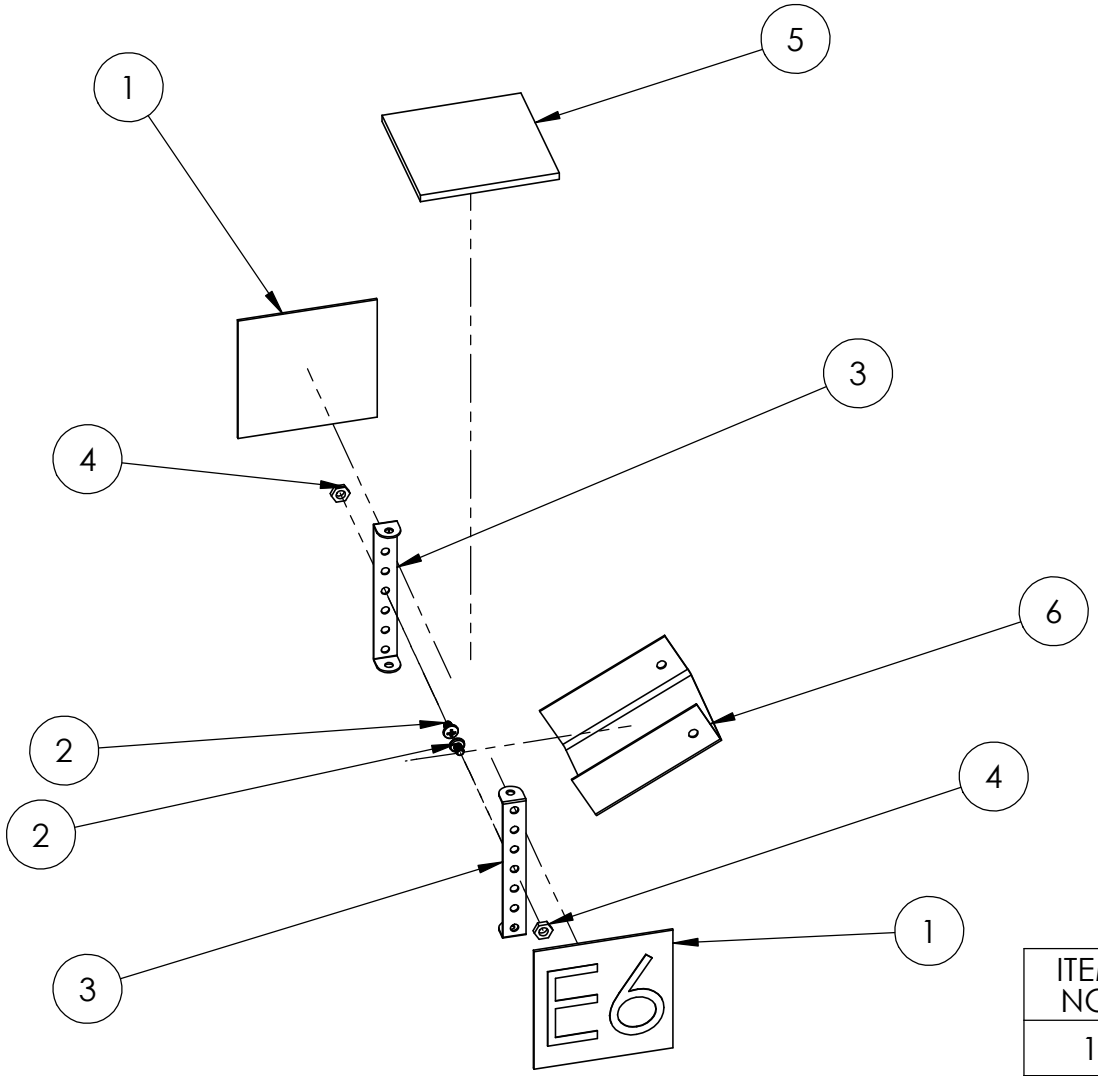

ITEM NO.	PART NUMBER	MATERIAL	QTY.
1	POST-IT NOTE	PAPER	2
2	#8 SCREW, 0.25"		2
3	DOUBLE ANGLE STRIP, 3.5"x.5" 1x7x1 HOLE		2
4	#8 NUT		2
5	QR MOUNT		1
6	RAMP	ALUMINUM	1

The Ohio State University First Year Engineering	Dwg. Title: TOP RAMP	Inst.: CLINGAN	Scale: 1:4	Dwg. No.: 10
	Drawn By: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/18/22

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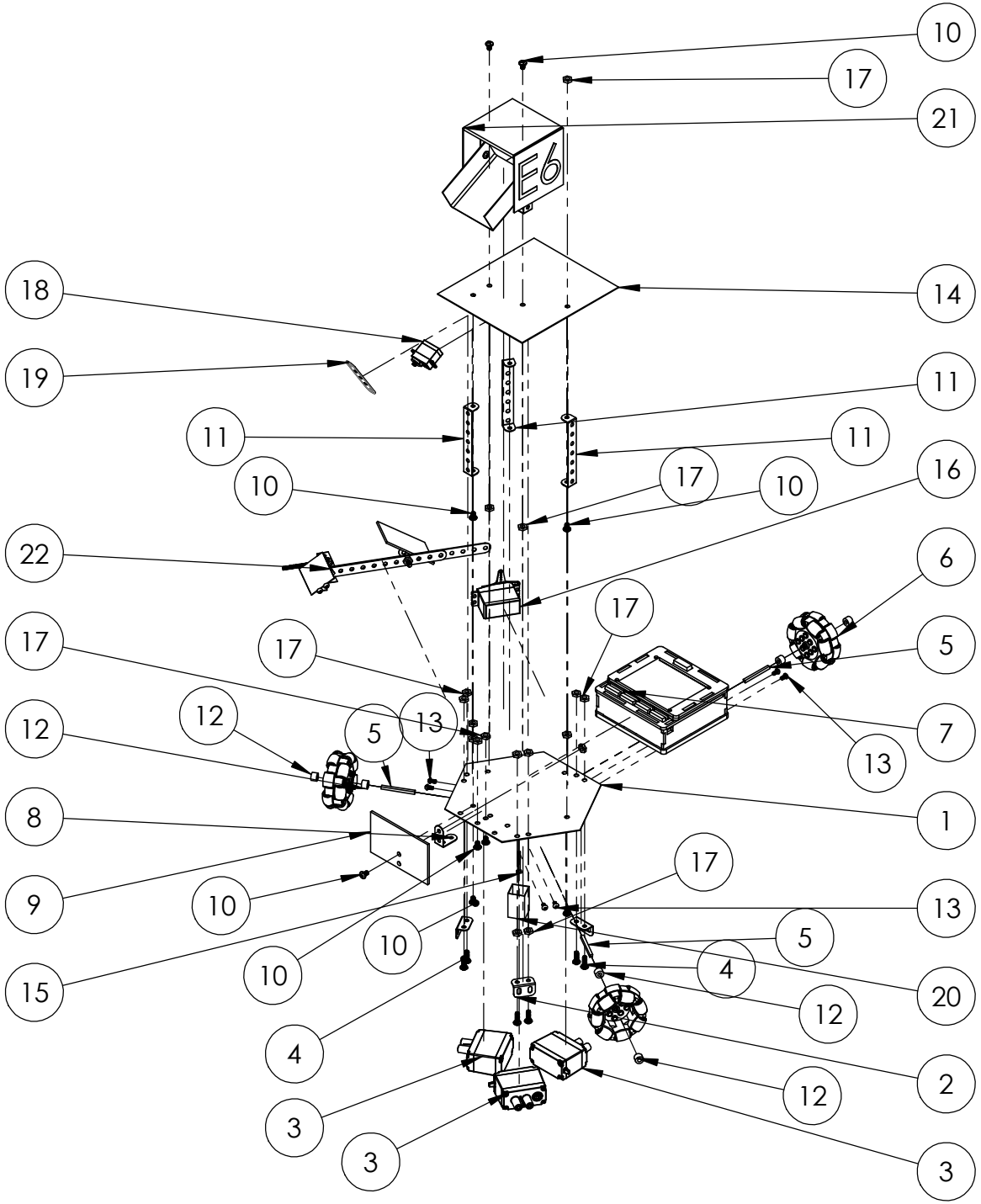

The Ohio State University First Year Engineering	Dwg. Title: OMNIBOT	Inst.:CLINGAN	Scale: 1:7	Dwg. No.: 12
	Drawn Bv: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/18/22

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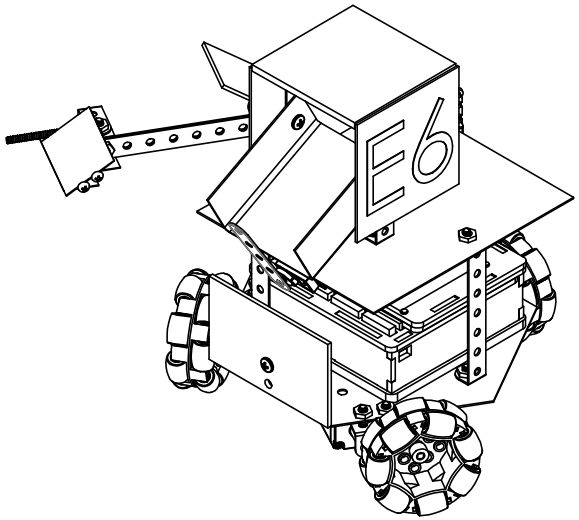

ITEM NO.	PART NUMBER	MATERIAL	QTY.
1	OMNI-HEX-BASE	ALUMINUM	1
2	ANGLE GIRDER, 1" 2 HOLE		3
3	VEX MOTOR		3
4	#8 SCREW, .5"		6
5	VEX AXLE ROD, 1.5"		3
6	OMNI WHEEL		3
7	PROTEUS		1
8	ANGLE BRACKET, 1x1" 2x2 HOLE		1
9	SIDEWALL	ALUMINUM	1
10	#8 SCREW, 0.25"		9

ITEM NO.	PART NUMBER	MATERIAL	QTY.
11	DOUBLE ANGLE STRIP, 3.5"x.5" 1x7x1 HOLE		3
12	SMALL PLASTIC SPACER		6
13	#6 SCREW, .25"		6
14	UPPER BASE	ALUMINUM	1
15	CDS CELL		1
16	FUTABA SERVO MOTOR		1
17	#8 NUT		17
18	MICRO SERVO MOTOR		1
19	STRIP, 2.5" 5 HOLE		1
20	CDS COVER	CARDBOARD	1
21	TOP RAMP		1
22	ROBOT ARM		1

The Ohio State University First Year Engineering	Dwg. Title: OMNIBOT (NOT EXPLODED)	Inst.CLINGAN	Scale: 1:4	Dwg. No.: 11
	Drawn By: DANIEL RIHM	Hour: 12:40	Units: INCHES	Date: 4/18/22

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