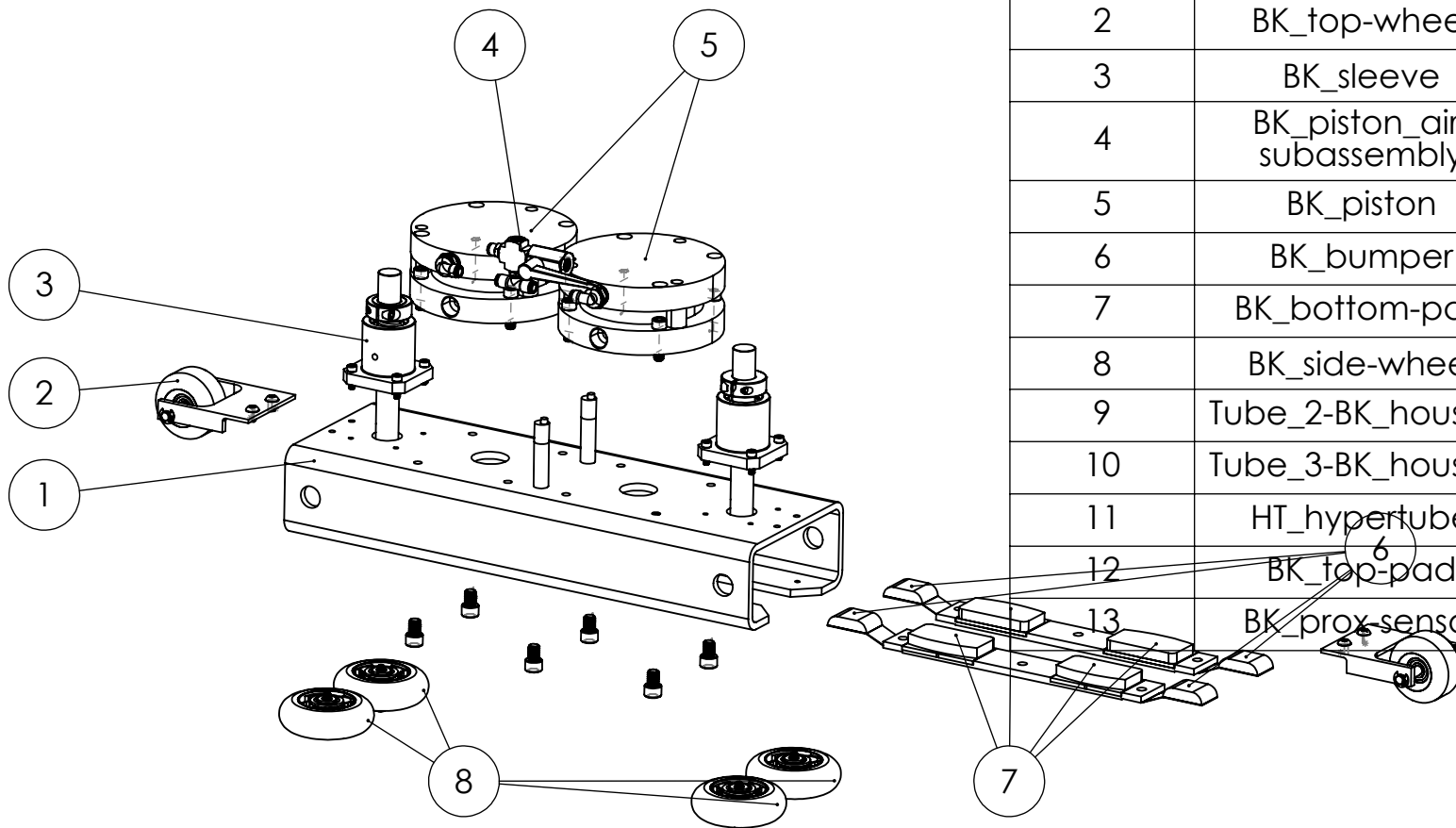
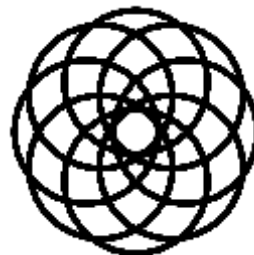




ITEM NO.	SW-File Name(File Name)	QTY.
1	BK_housing	1
2	BK_top-wheel	2
3	BK_sleeve	2
4	BK_piston_air-subassembly	1
5	BK_piston	2
6	BK_bumper	4
7	BK_bottom-pad	2
8	BK_side-wheel	4
9	Tube_2-BK_housing	1
10	Tube_3-BK_housing	1
11	HT_hypertube	1
12	BK_top-pad	1
13	BK_prox sensor	2

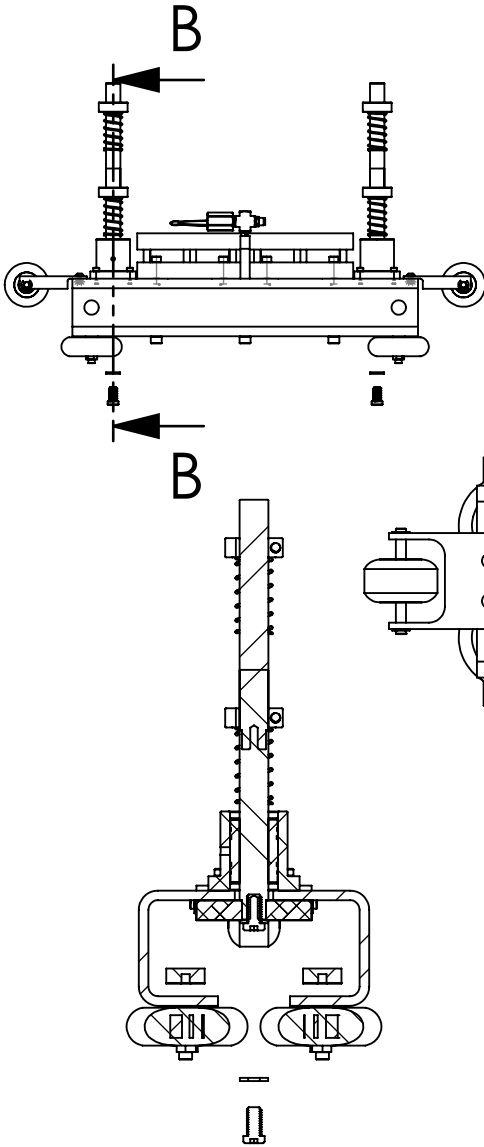
SOLIDWORKS Educational Product. For Instructional Use Only



			Paradigm Hyperloop		
DRAWN	MANNY	7/16	ASSEMBLY		
CHECKED					
MATERIAL			SIZE	DWG. NO.	REV
FINISH LOVE			A	01	01
DO NOT SCALE DRAWING			SCALE: 1:6	2017	SHEET 1 OF 20

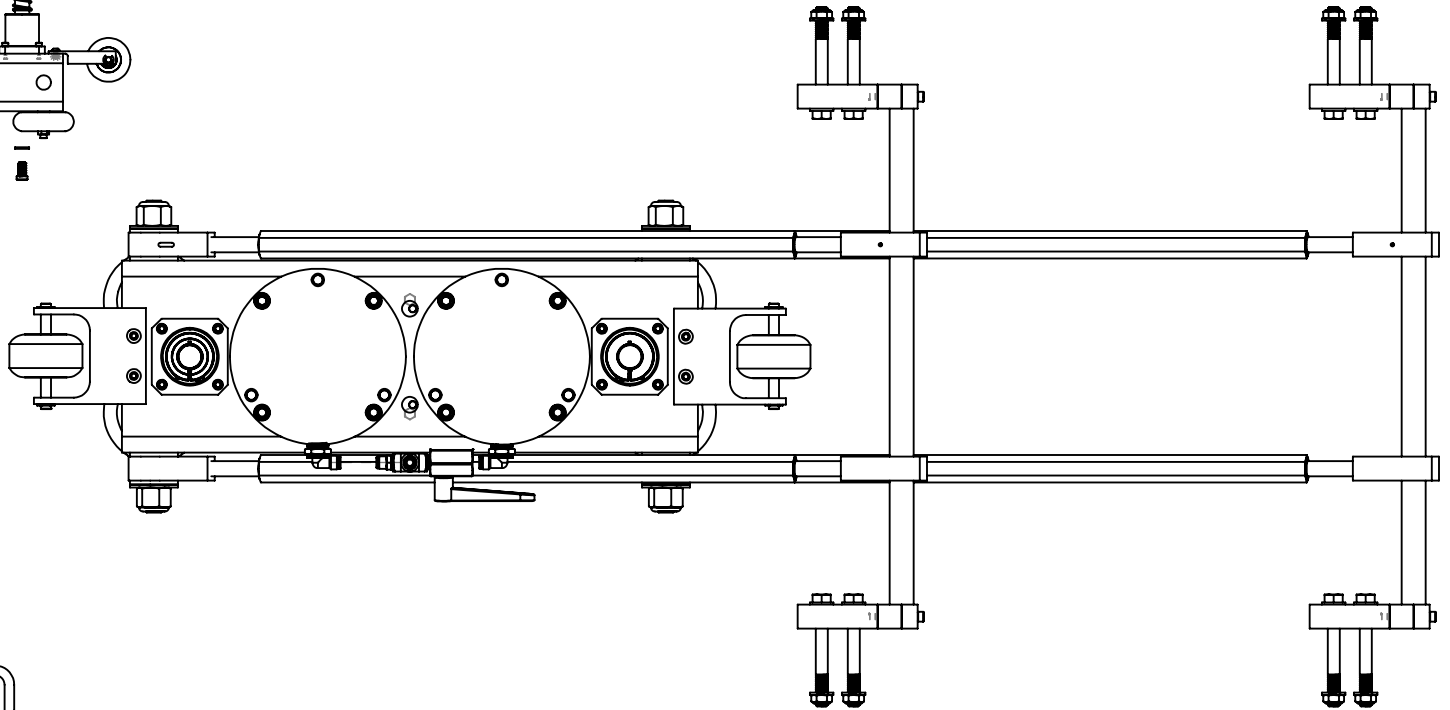
B

B



A

A



SECTION B-B

SCALE 1 : 5

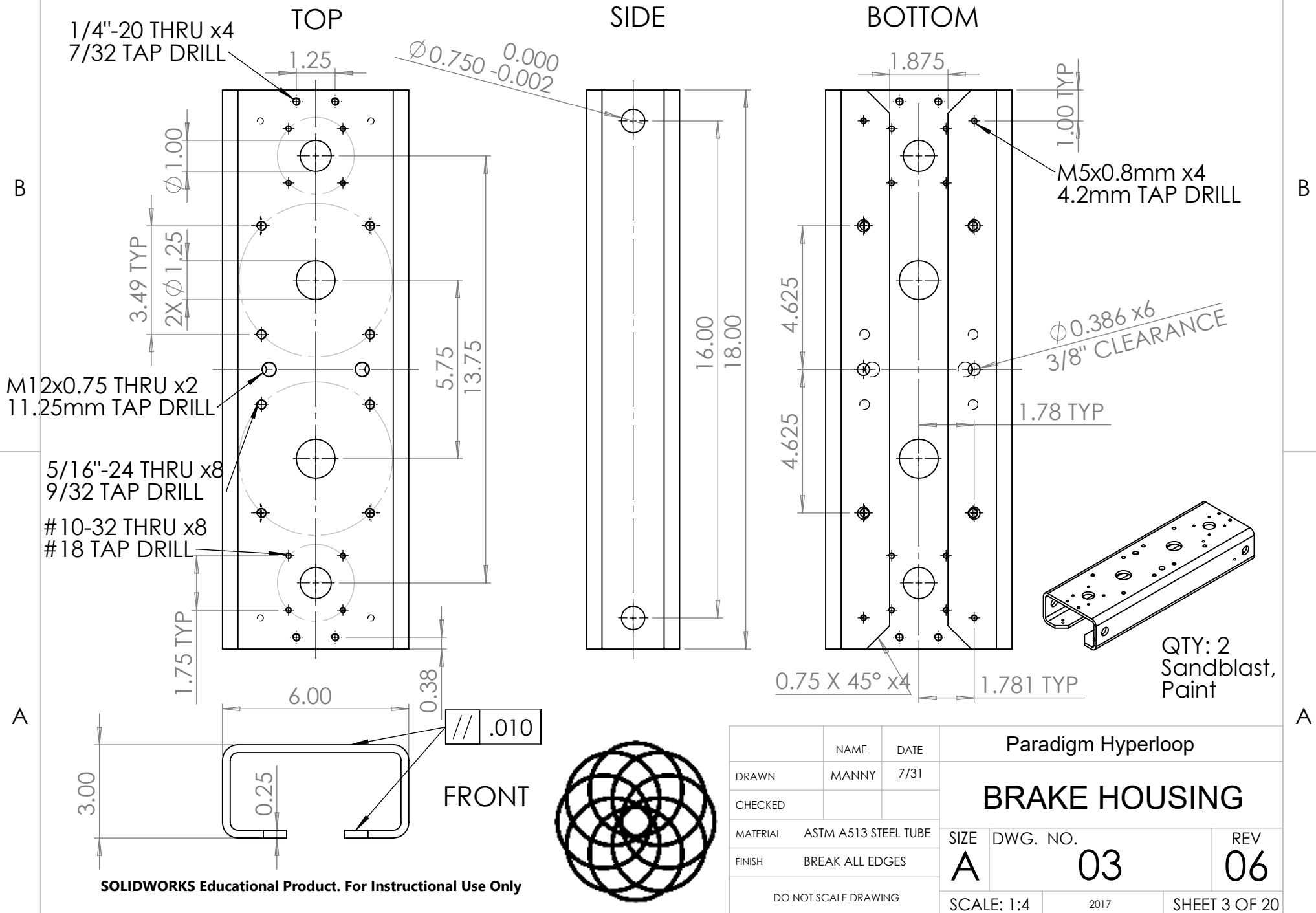
SOLIDWORKS Educational Product. For Instructional Use Only



			Paradigm Hyperloop		
DRAWN	MANNY	7/16	ASSEMBLY CONT'D		
CHECKED					
MATERIAL			SIZE	DWG. NO.	REV
FINISH			A	02	01
DO NOT SCALE DRAWING			SCALE: 1:10	2017	SHEET 2 OF 20

2

1



2

1

2

1

4X BK_wilwood-6211

2X BK_pad-screw 3/8-16x.500

2X BK_pad-washer-skinny

BK_heatsink

2X BK_padshaft-notap-shorter

2X BK_pad-spring

2X BK_top-pad shaft-collar

QTY: 2

SOLIDWORKS Educational Product. For Instructional Use Only

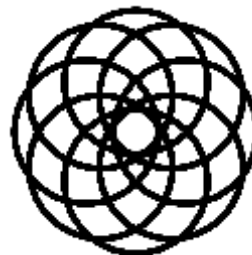
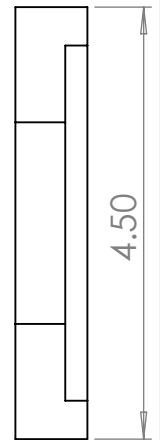


			Paradigm Hyperloop		
DRAWN	MANNY	7/16	TOP PAD ASSEMBLY		
CHECKED					
MATERIAL			SIZE	DWG. NO.	REV
FINISH			A	04	01
DO NOT SCALE DRAWING			SCALE: 1:3	2017	SHEET 4 OF 20

2

1

1



QTY: 2

	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/17	BRAKE TOP PAD		
CHECKED					
MATERIAL	6061 ALUMINUM PLATE		SIZE	DWG. NO.	REV
FINISH	BREAK ALL EDGES		A	05	02
DO NOT SCALE DRAWING			SCALE: 1:2	2017	SHEET 5 OF 20

SOLIDWORKS Educational Product. For Instructional Use Only

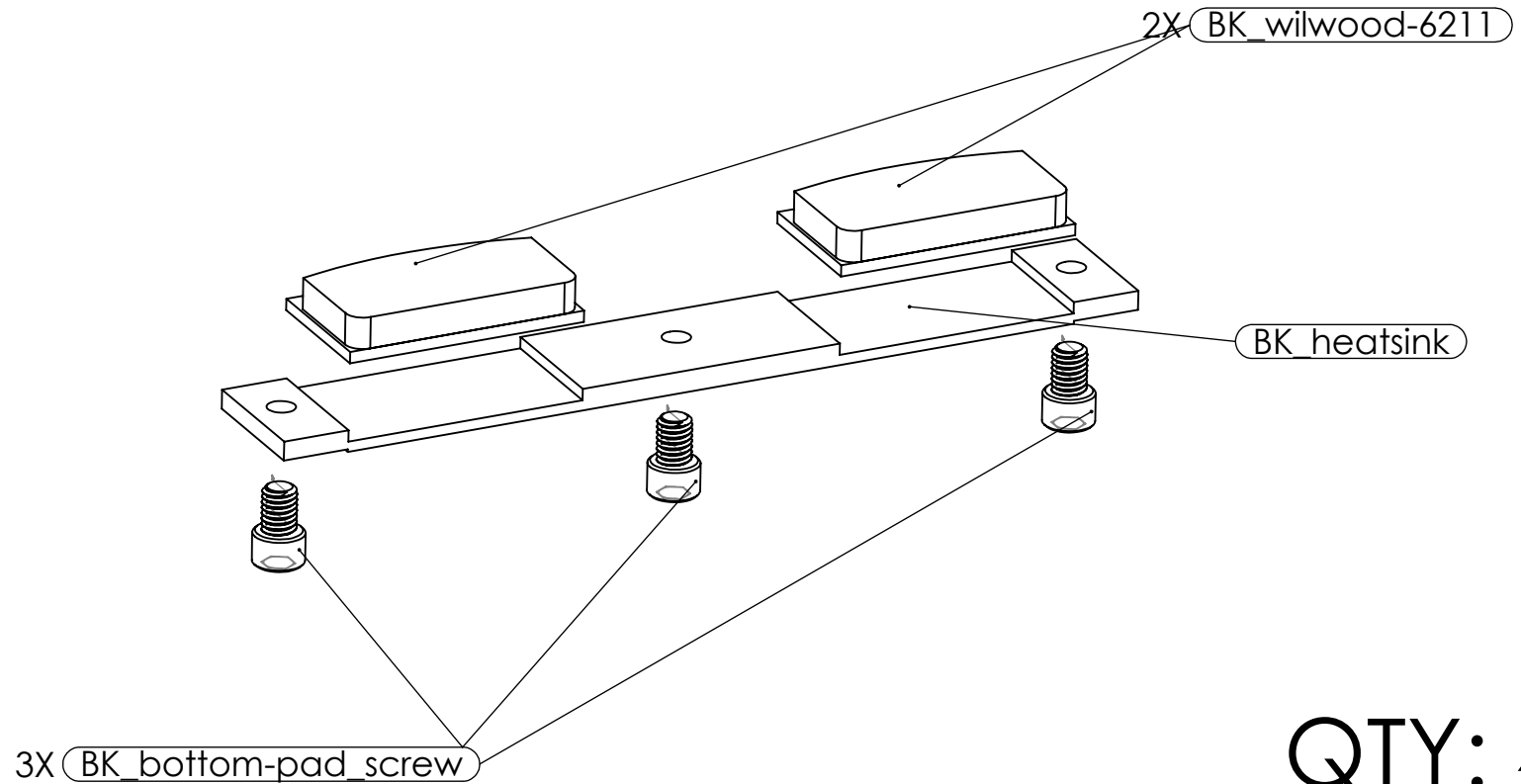
1

2

1

B

B



A

A

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/16	BOTTOM PAD ASSEMBLY		
CHECKED					
MATERIAL			SIZE	DWG. NO.	REV
FINISH			A	06	01
DO NOT SCALE DRAWING			SCALE: 1:2	2017	SHEET 6 OF 20

2

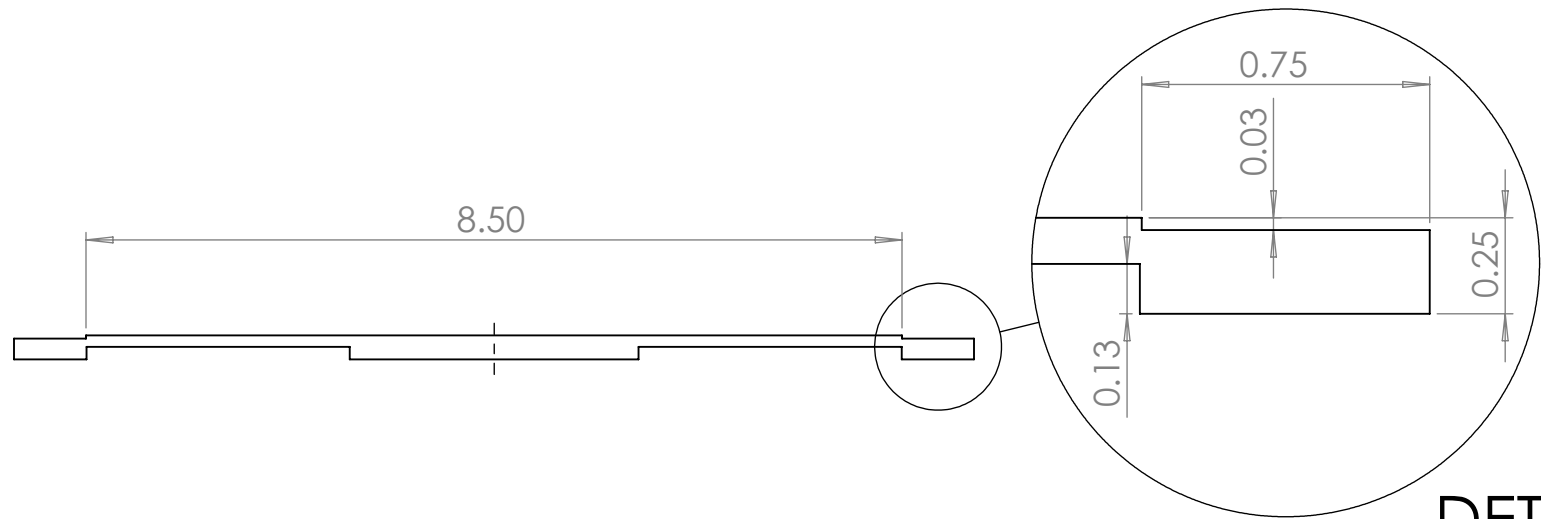
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2

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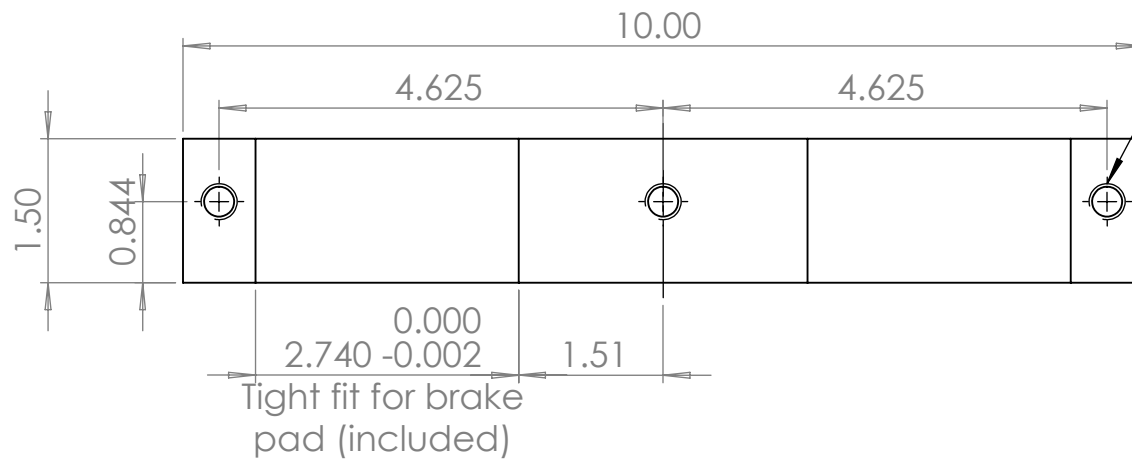
B

B



DETAIL A

SCALE 2 : 1



3/8-16 Machine Threads TYP
5/16" TAP DRILL

QTY: 4

A

A

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/31	BRAKE BOTTOM PAD		
CHECKED					
MATERIAL	6061 BAR STOCK		SIZE	DWG. NO.	REV
FINISH	BREAK ALL EDGES		A	07	03
DO NOT SCALE DRAWING			SCALE: 1:2	2017	SHEET 7 OF 20

2

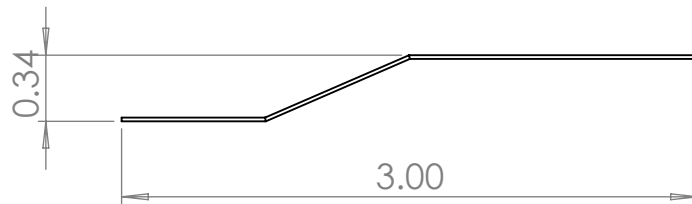
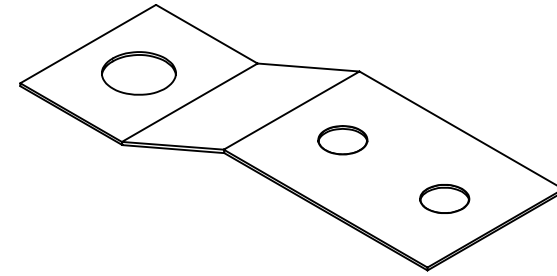
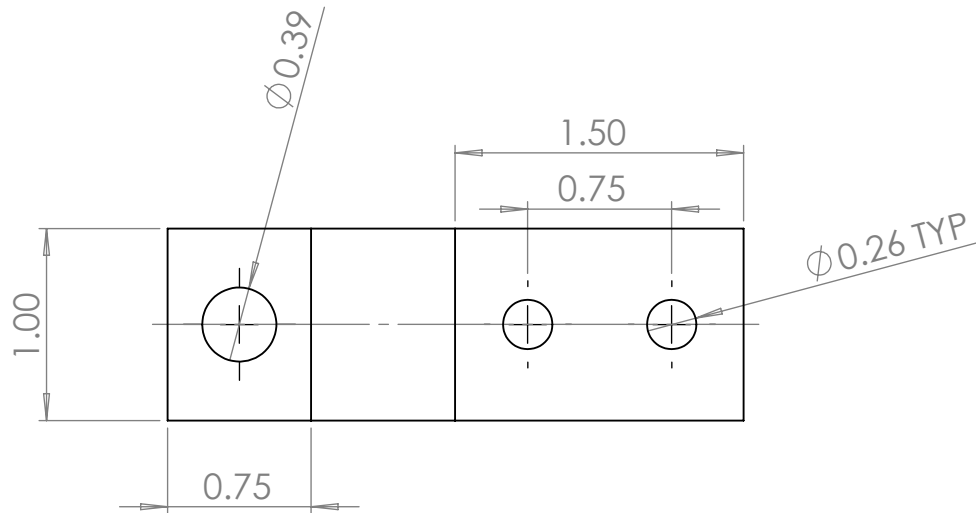
1

2

1

B

B

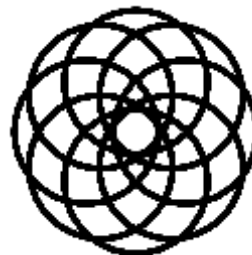


QTY: 8

A

A

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/17	BRAKE BUMPER SPRING		
CHECKED					
MATERIAL	.018" 1020 SPRINGSTEEL		SIZE	DWG. NO.	REV
FINISH	ANNEAL		A	08	02
DO NOT SCALE DRAWING			SCALE: 1:1	2017	SHEET 8 OF 20

2

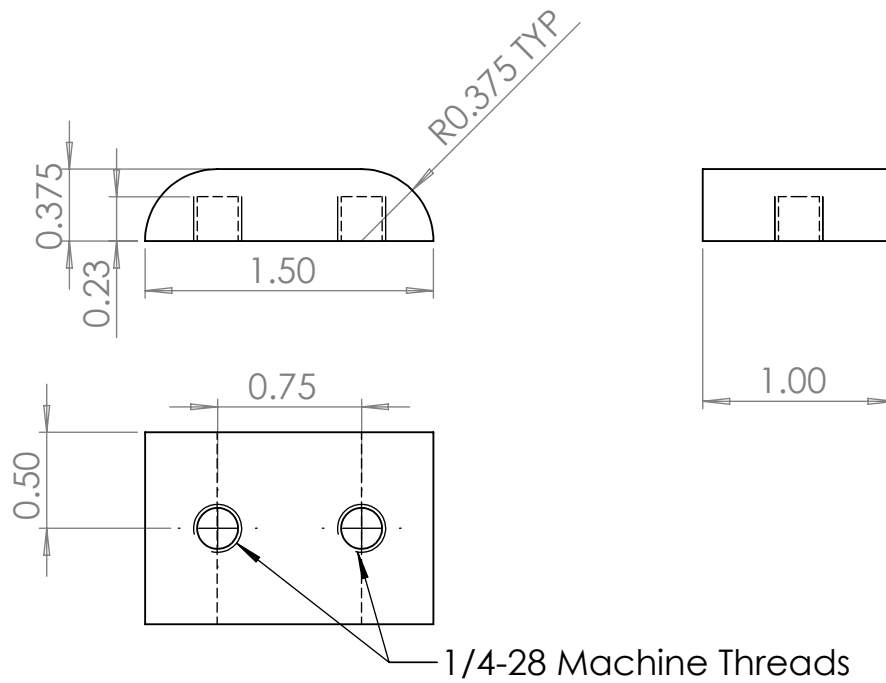
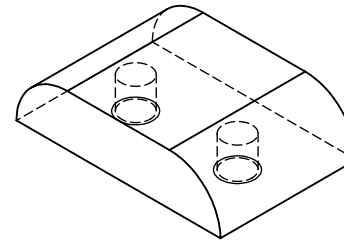
1

2

1

B

B



QTY: 8

A

A

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	07/16	BRAKE BUMPER PAD		
CHECKED					
MATERIAL	HDPE BAR STOCK		SIZE	DWG. NO.	REV
FINISH	ROUGHEN		A	09	01
DO NOT SCALE DRAWING			SCALE: 1:1	2017	SHEET 9 OF 20

2

1

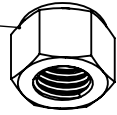
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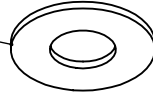
B

B

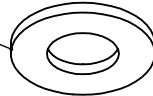
BK_stud-nut



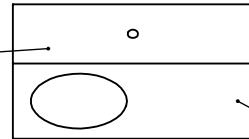
BK_stud-washer (steel)



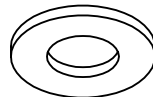
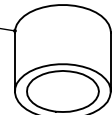
2X BK_linkage-washer (delrin)



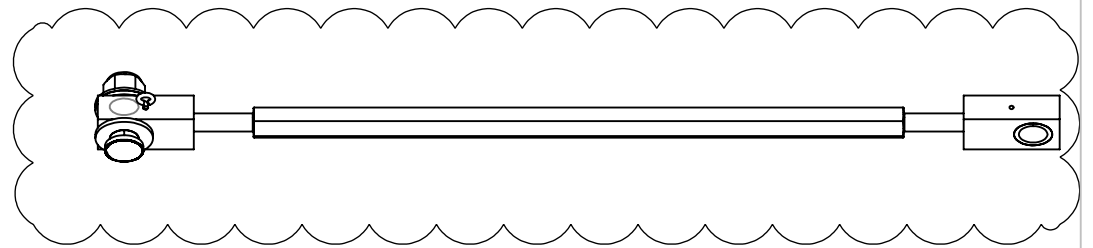
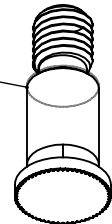
2X BK_rod-end



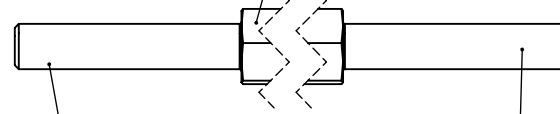
2X BK_linkage-sleeve (PTFE-GF)



BK_should-er-bolt

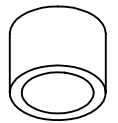
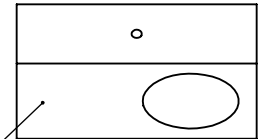


BK_connecting-rod



M12x1.75 LEFT-HANDED

M12x1.75 RIGHT-HANDED

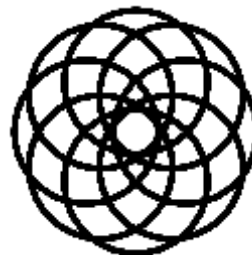


A

A

QTY: 8

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/16	ARM ASSEMBLY		
CHECKED					
MATERIAL			SIZE	DWG. NO.	REV
FINISH			A	10	01
DO NOT SCALE DRAWING			SCALE: 1:2	2017	SHEET 10 OF 20

2

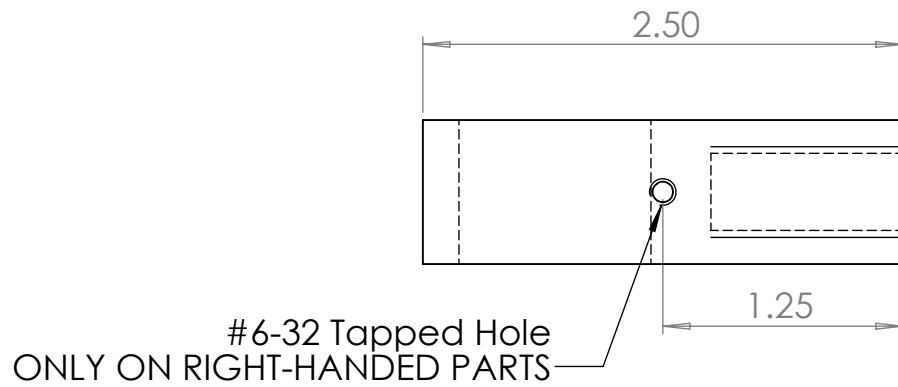
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2

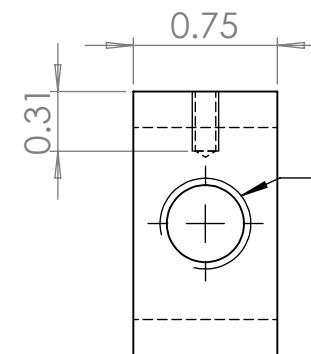
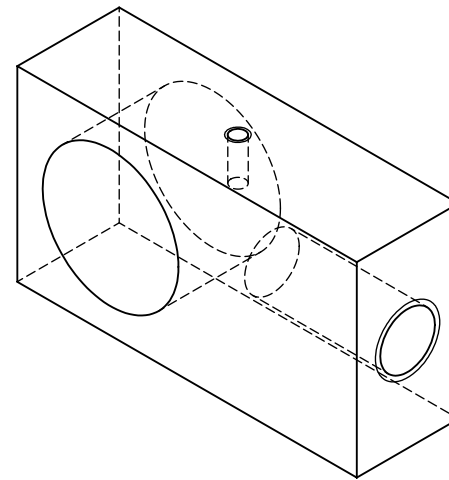
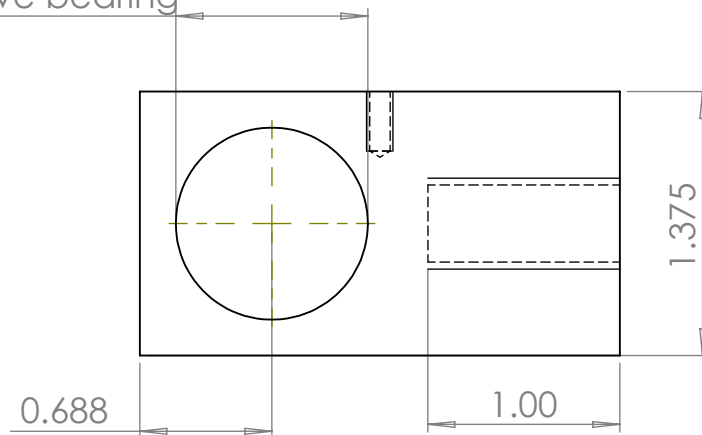
1

B

B



0.000
 $\varnothing 1.000 -0.002$ THRU
 Press fit for PTFE
 sleeve bearing

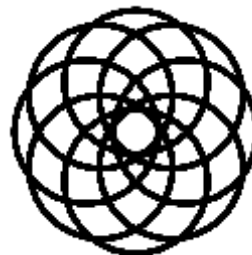


QTY: 16 Total
 8X Right-hand M12, 8X Left-hand M12

A

A

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2

1

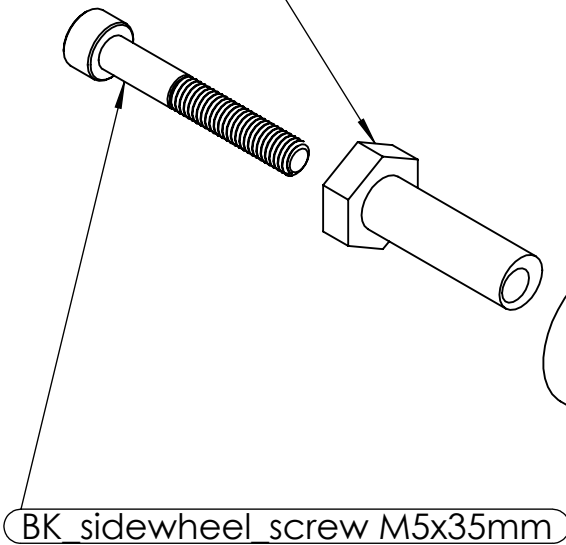
	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/31	BRAKE ROD END		
CHECKED					
MATERIAL	4140 STEEL BAR STOCK		SIZE	DWG. NO.	REV
FINISH	BREAK ALL EDGES		A	11	04
DO NOT SCALE DRAWING			SCALE: 1:1	2017	SHEET 11 OF 20

2

1

BK_eccentric-bushing

BK_rollerblade-wheel_outer

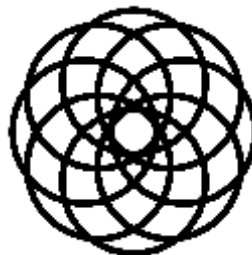


BK_608-bearing 2X

BK_sidewheel_washer

QTY: 8

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/16	SIDE WHEEL ASSEMBLY		
CHECKED					
MATERIAL			SIZE	DWG. NO.	REV
FINISH			A	12	01
DO NOT SCALE DRAWING			SCALE: 1:1	2017	SHEET 12 OF 20

2

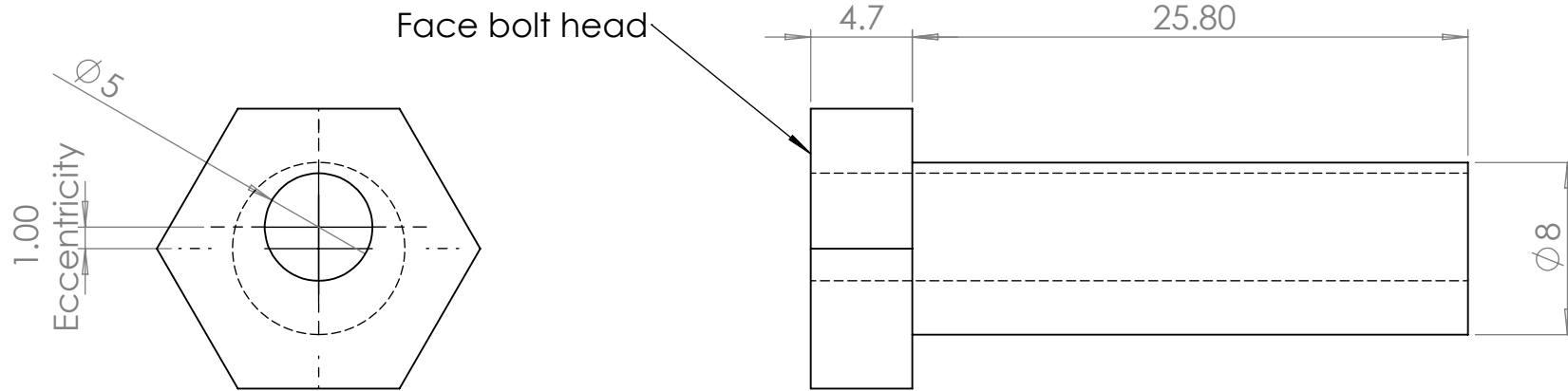
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2

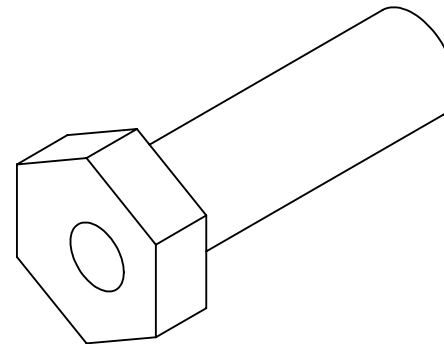
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B

B



DIMENSIONS IN MILLIMETERS
Modify blue zinc-plated M8x60 bolt

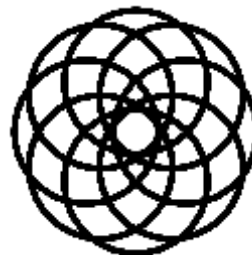


QTY: 8

A

A

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/18	ECCENTRIC BUSHING		
CHECKED					
MATERIAL	ZINC-PLATED STEEL BOLT		SIZE	DWG. NO.	REV
FINISH	BREAK ALL EDGES		A	13	03
DO NOT SCALE DRAWING			SCALE: 3:1	2017	SHEET 13 OF 20

2

1

2

1

2X BK_608-bearing

BK_topwheel_shaft

2X BK_topwheel_screw 1/4-20x.375

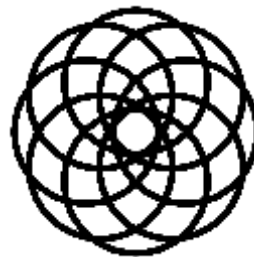
BK_wheel_bracket

BK_top-wheel_small

2X BK_topwheel_circlip

QTY: 4

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY		7/16		
CHECKED					
MATERIAL			SIZE	DWG. NO.	REV
FINISH			A	14	01
DO NOT SCALE DRAWING			SCALE: 1:1	2017	SHEET 14 OF 20

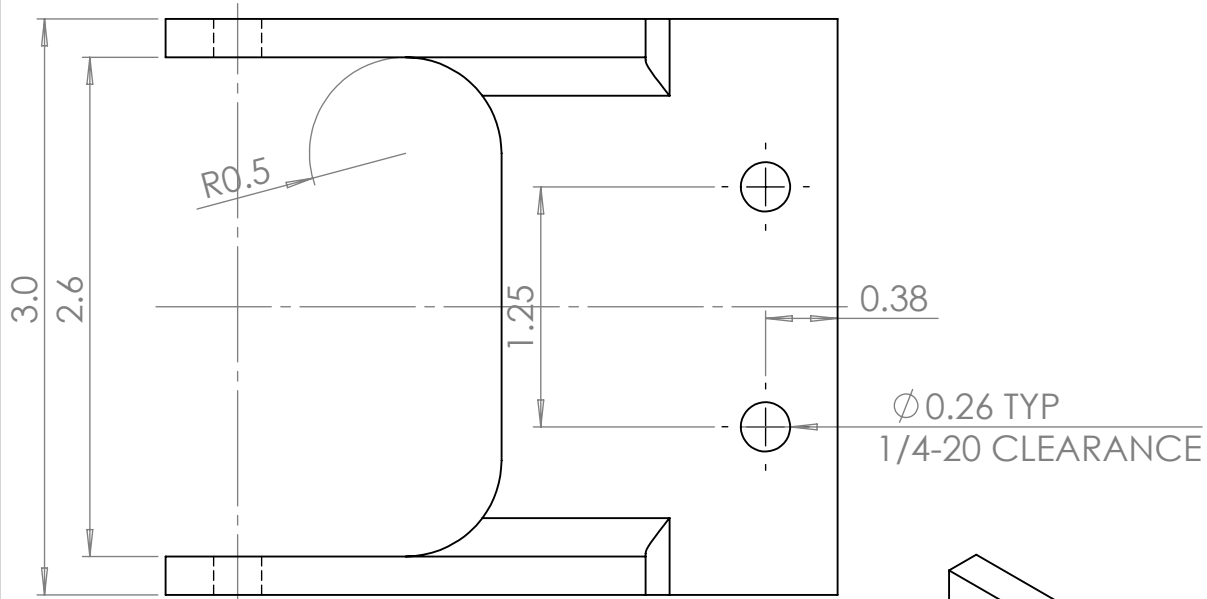
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1

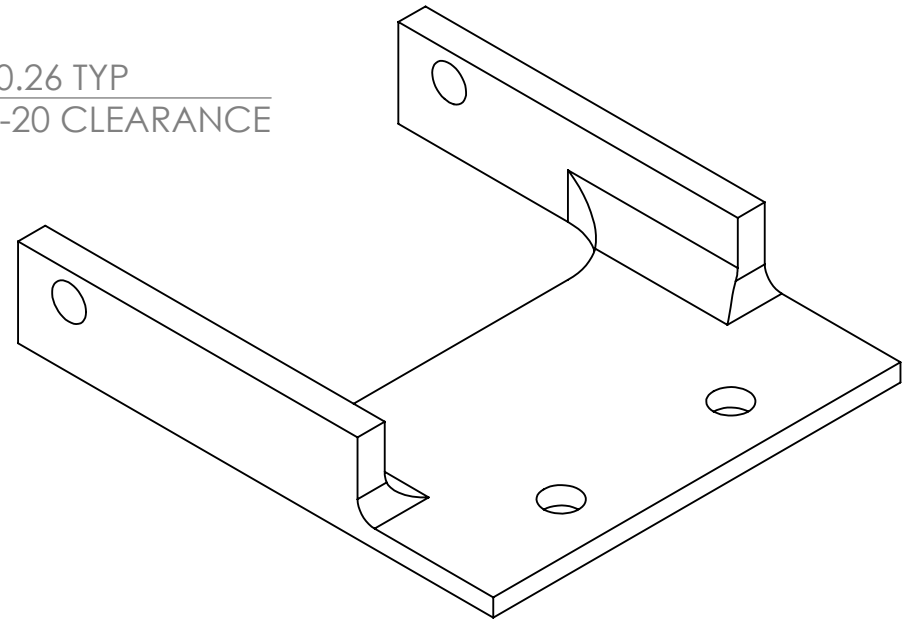
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1

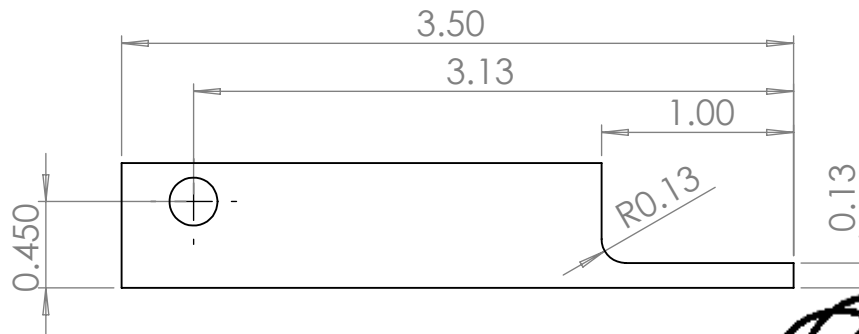
B



B



A



A

QTY: 4

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/18	TOP WHEEL BRACKET		
CHECKED					
MATERIAL	6061 U EXTRUSION		SIZE	DWG. NO.	REV
FINISH	BREAK ALL EDGES		A	15	04
DO NOT SCALE DRAWING			SCALE: 1:1	2017	SHEET 15 OF 20

2

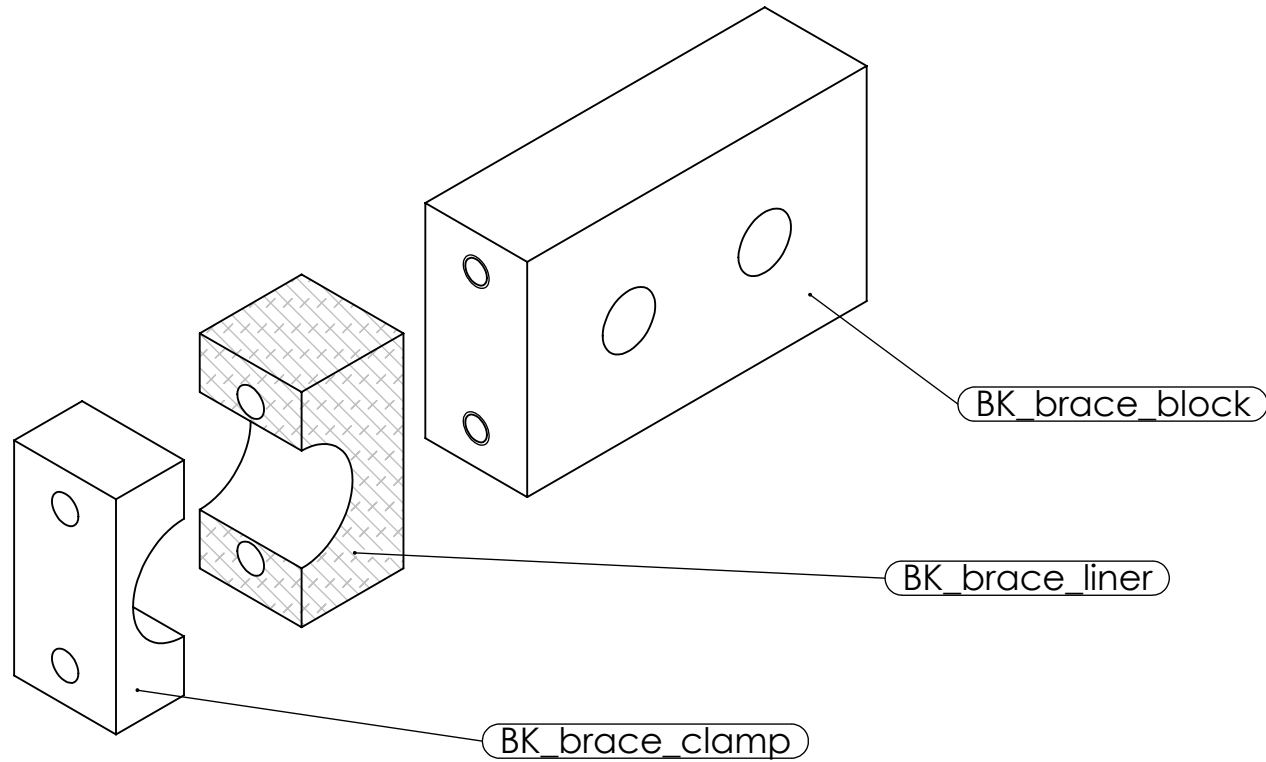
1

2

1

B

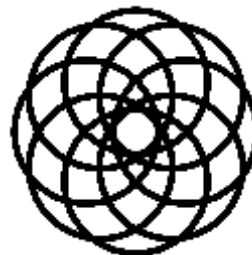
B



A

A

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/16	BRAKE BRACE		
CHECKED					
MATERIAL	6061, NEOPRENE		SIZE	DWG. NO.	REV
FINISH			A	16	01
DO NOT SCALE DRAWING			SCALE: 1:1	2017	SHEET 16 OF 20

2

1

2

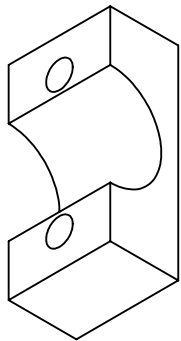
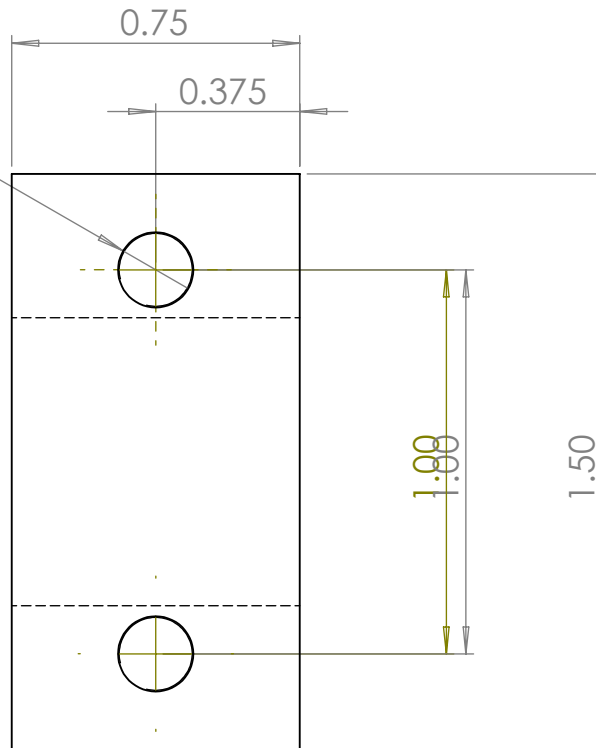
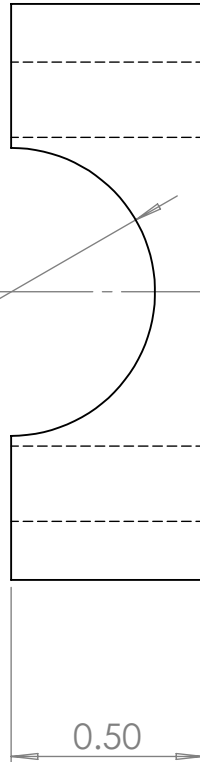
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B

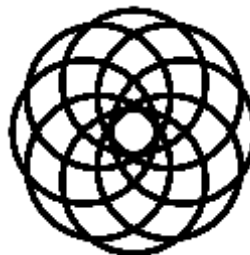
B

$\phi 0.20$ THRU
Clearance for #10-32

R0.375 $+0.01$
0.00



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QTY: 8

A

A

	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/16	BRAKE BRACE CLAMP		
CHECKED					
MATERIAL	6061 BAR		SIZE	DWG. NO.	REV
FINISH	BREAK ALL EDGES		A	17	01
DO NOT SCALE DRAWING			SCALE: 2:1	2017	SHEET 17 OF 20

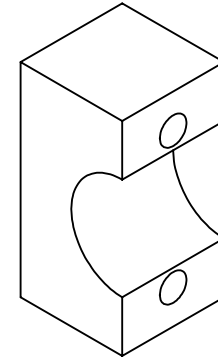
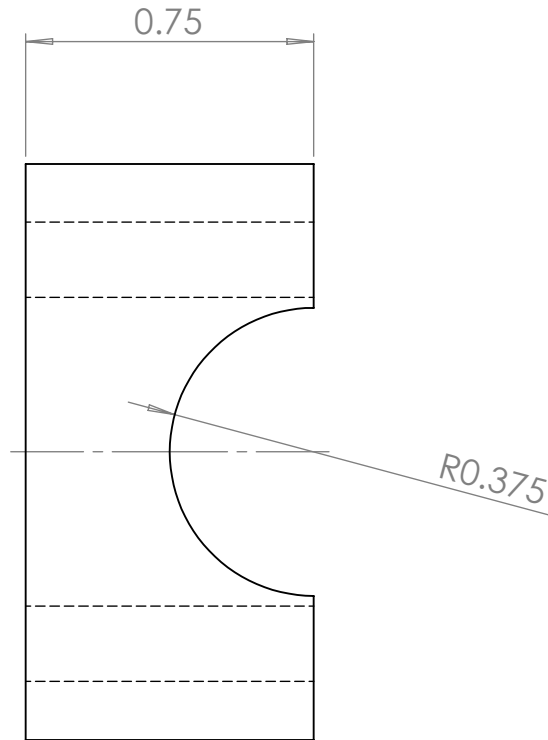
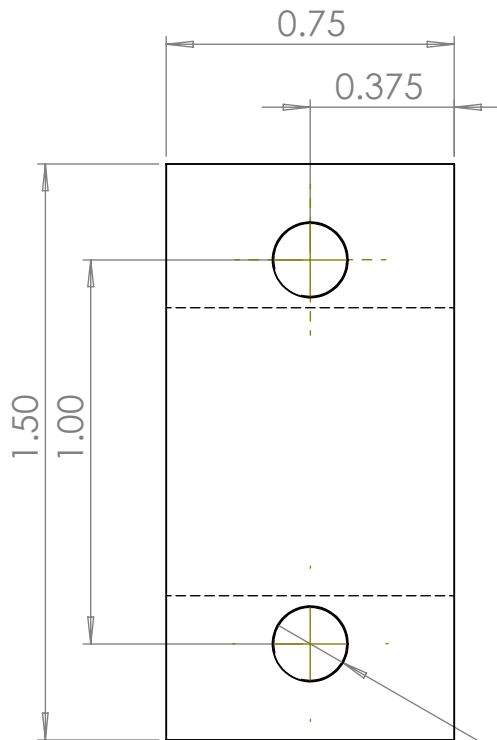
2

1

2

1

B



B

A

Ø 0.20 THRU
Clearance for #10-32

QTY: 8

A

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/17	BRAKE BRACE LINER		
CHECKED					
MATERIAL	NEOPRENE STRIP 70A		SIZE	DWG. NO.	REV
FINISH			A	18	02
DO NOT SCALE DRAWING			SCALE: 2:1	2017	SHEET 18 OF 20

2

1

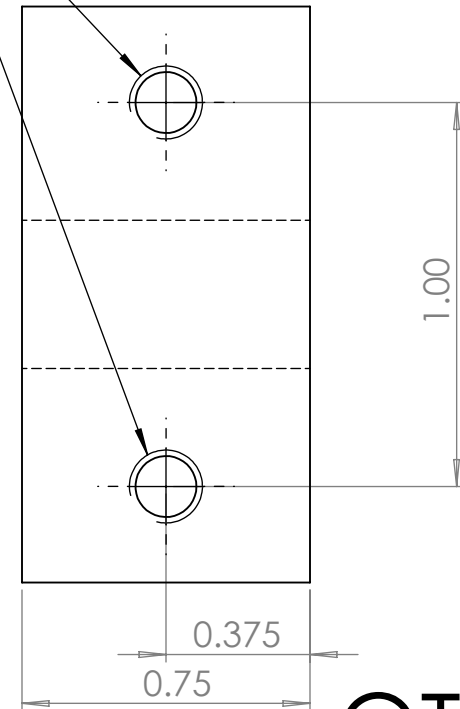
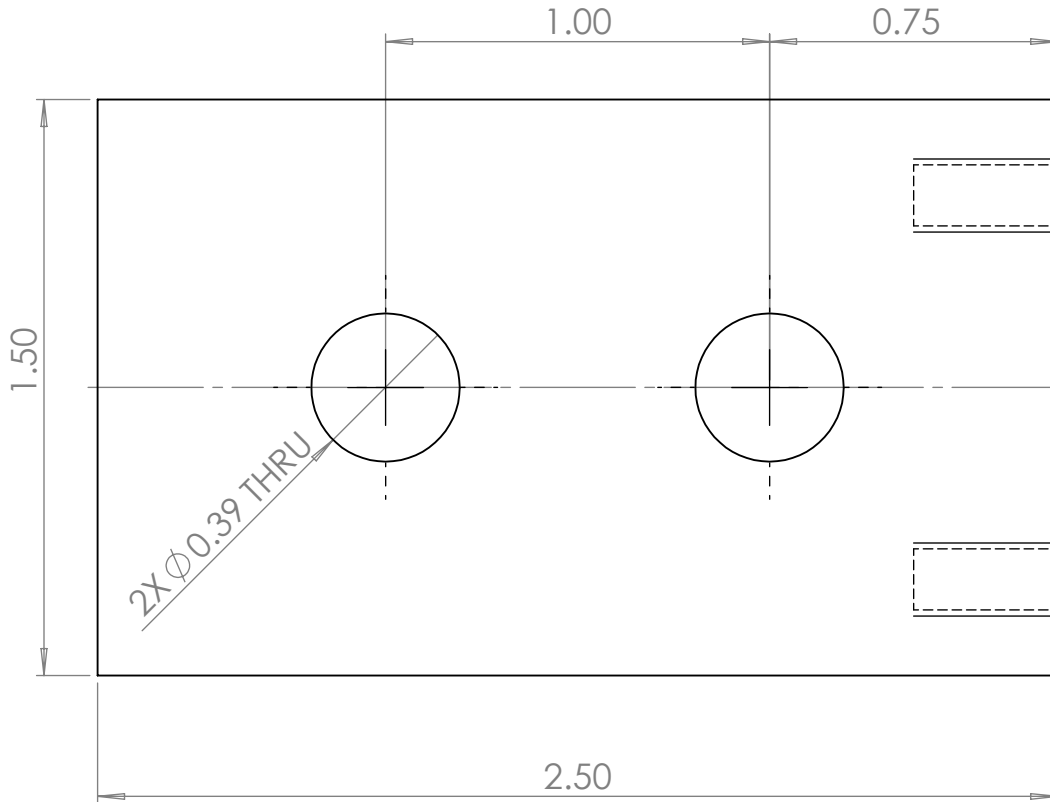
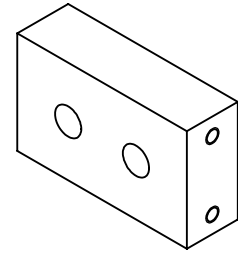
2

1

B

B

#10-32 Machine Threads TYP
#21 Tap drill



QTY: 8

A

A

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/16	BRAKE BRACE BLOCK		
CHECKED					
MATERIAL	6061 BAR		SIZE	DWG. NO.	REV
FINISH	BREAK ALL EDGES		A	19	00
DO NOT SCALE DRAWING			SCALE: 2:1	2017	SHEET 19 OF 20

2

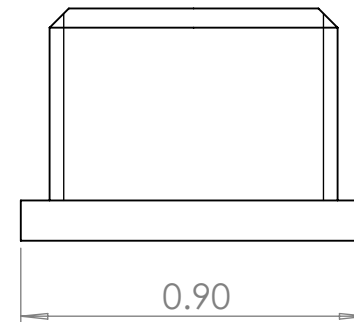
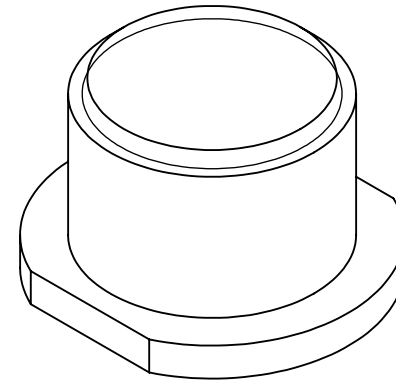
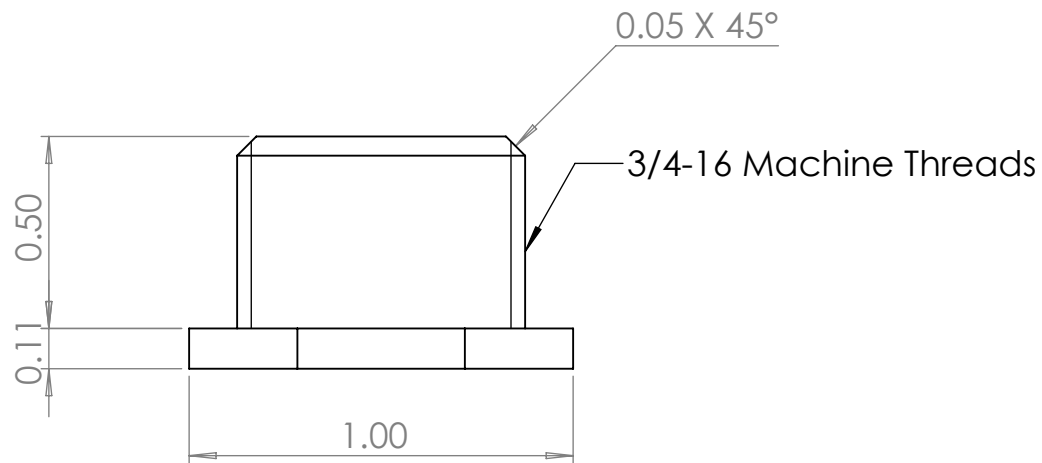
1

2

1

B

B



QTY: 4

A

A

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	NAME	DATE	Paradigm Hyperloop		
DRAWN	MANNY	7/16	BRAKE PISTON NUB		
CHECKED					
MATERIAL	BRASS		SIZE	DWG. NO.	REV
FINISH	BREAK ALL EDGES		A	20	01
DO NOT SCALE DRAWING			SCALE: 2:1	2017	SHEET 20 OF 20

2

1