

MATERIAL 6061 Al
FINISH NONE

COMMENTS:

Dimensions in Inch

TEAM NAME:
NASA RMC LUNABOTICS

TITLE:
ARTEMIS MINING ROBOT

DWG. NO.

1000

REV

-000

SCALE: 0.045 DO NOT SCALE

SHEET 1 OF 3

PROPRIETARY AND CONFIDENTIAL

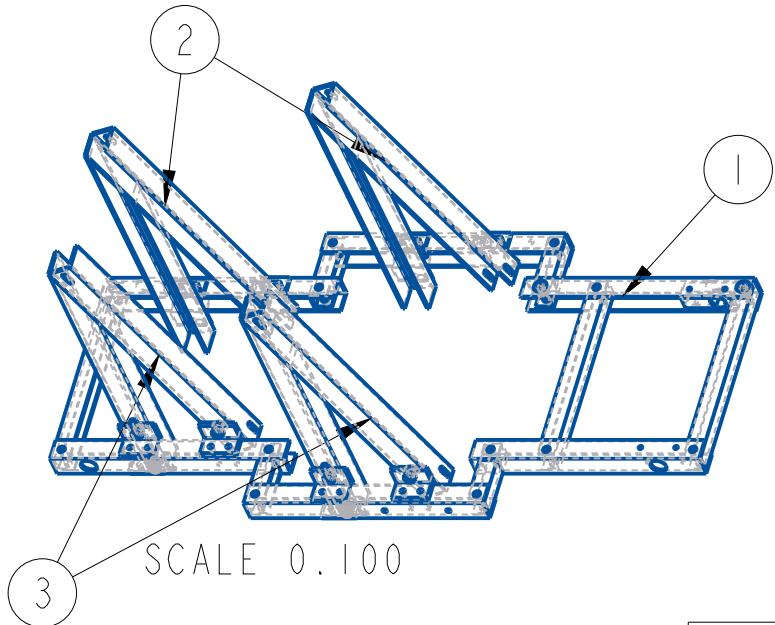
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIT. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIT IS PROHIBITED

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

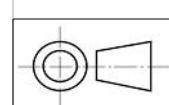
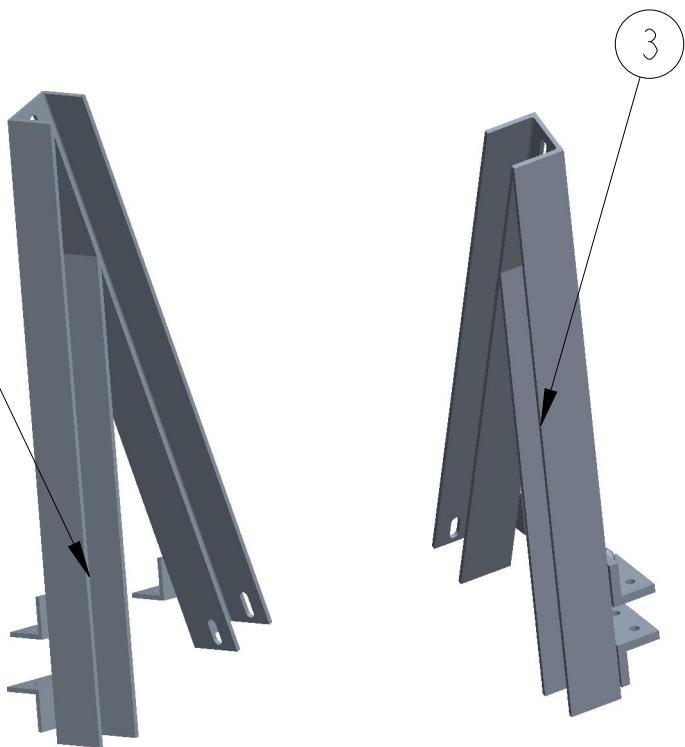
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



ITEM#	DESCRIPTION	QTY.
1	Chassis Base	1
2	Support_LHS	2
3	Support_RHS	2

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			CHECKED			TITLE: Chassis Assembly
<u>UNLESS OTHERWISE SPECIFIED:</u> DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 [0.81]		MATERIAL 6061 Al	FINISHED PART			
TWO PLACE DECIMAL ± 0.030 [0.4] THREE PLACE DECIMAL ± 0.005 [0.2] ANGULAR $\pm 2^{\circ}$ ALL FINISHES I25 OR BETTER		FINISH NONE				
COMMENTS:					DWG. NO.	REV
					C - 1000 - 03	03
					SCALE: 0.050	DO NOT SCALE
					SHEET 1 OF 2	



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5

4

3

2

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DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

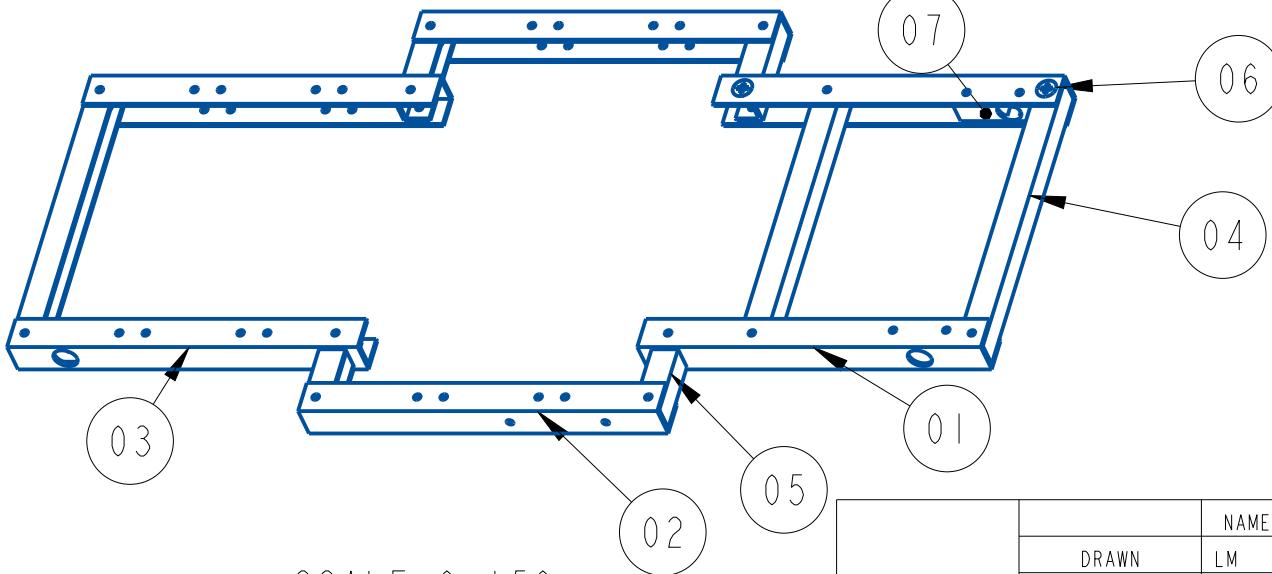
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



		NAME	DATE	TEAM NAME: NASA RMC
DRAWN	LM	Mar-05-20		
CHECKED				
APPROVED				
MATERIAL N/A	FINISHED PART			
FINISH N/A				
COMMENTS:			DWG. NO.	REV
			C-1200-03	03
			SCALE: 0.050	DO NOT SCALE
				SHEET 2 OF 2

ITEM NO.	DESCRIPTION	QTY.
01	Front Side-Member	2
02	Middle Side-Member	2
03	Back Side-Member	2
04	Cross-Member	3
05	Connector	4
06	3/8"-16 x 3/4"	13
07	Stiffener	4



SCALE 0.150

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

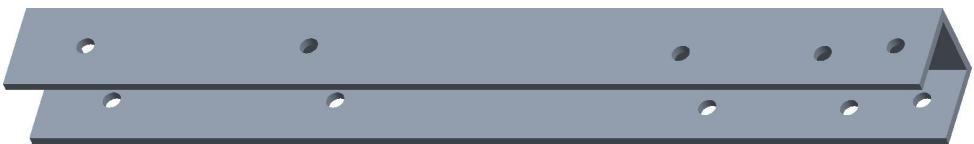
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.8]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

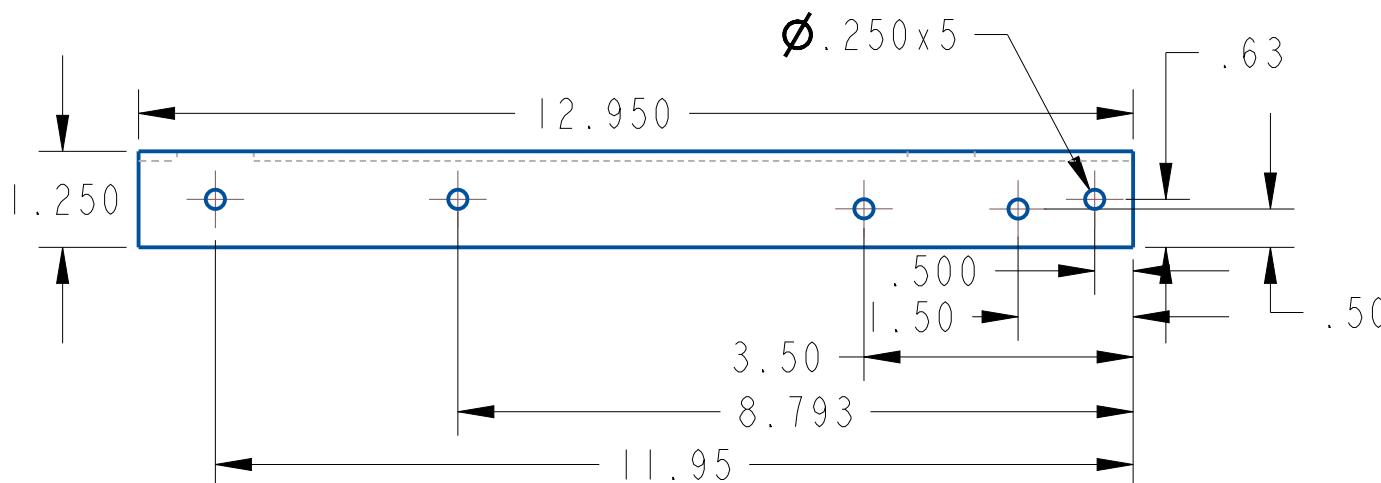
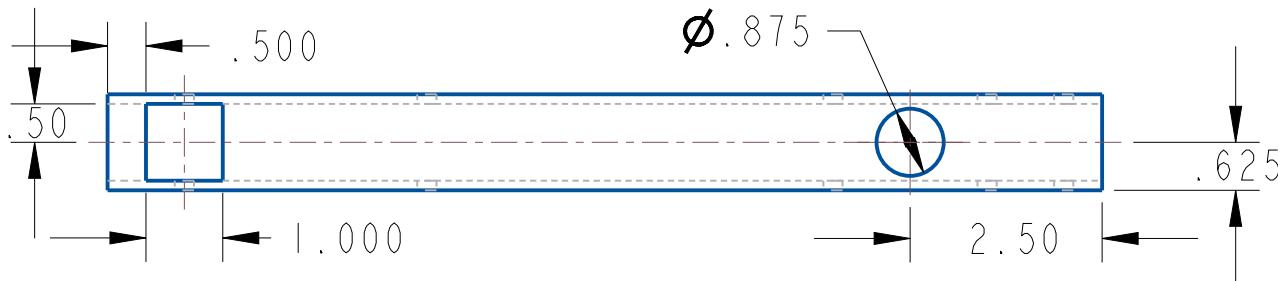
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		NAME	DATE	TEAM NAME: NASA RMC
	DRAWN	LM	Jan-20-20	TITLE: CHASSIS_FRAME
	CHECKED			
APPROVED				
MATERIAL 6063 AL	FINISHED PART		DWG. NO. C-1300-001	
FINISH NONE				
COMMENTS:				
REV 01				
SCALE: 0.067 DO NOT SCALE			SHEET 1 OF 1	



SCALE 0.400



SCALE 0.400

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

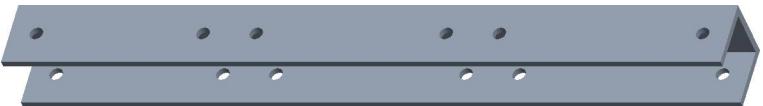
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

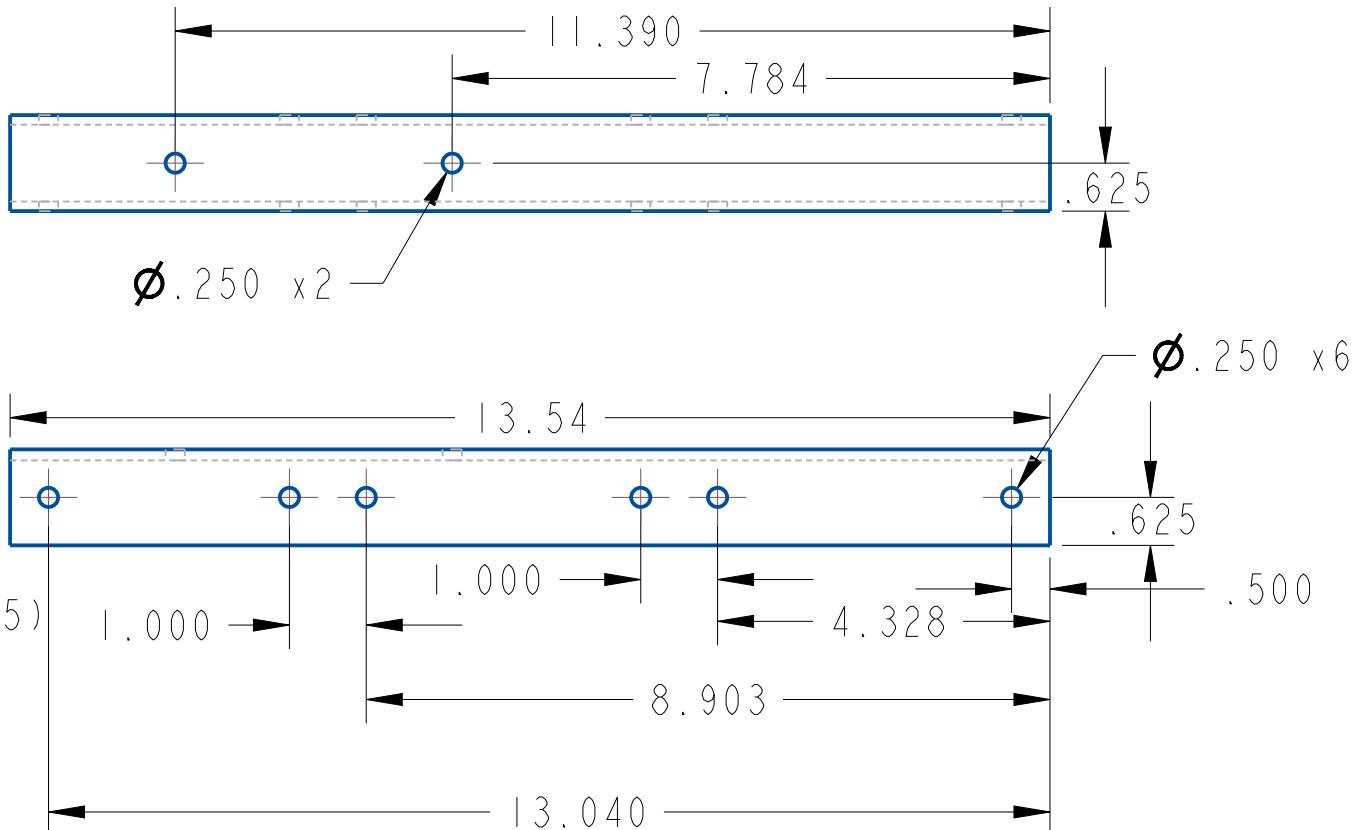
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		NAME	DATE	TEAM NAME: NASA RMC
	DRAWN	LM	Jan-20-20	
	CHECKED			
	APPROVED			
MATERIAL 6063 AL	FINISHED PART			
FINISH NONE				
COMMENTS:				DWG. NO.
MAKE OUT OF Architectural 6063 Aluminum U-Channel 1/8" THK, 1-1/4" High x 1-1/4" Wide				REV
C-1301-001				01
SCALE: 0.250 DO NOT SCALE				SHEET 1 OF 1



SCALE 0.300



		NAME	DATE	TEAM NAME: NASA RMC
	DRAWN	LM	Jan-20-20	
	CHECKED			
	APPROVED			
MATERIAL 6063 AL	FINISHED PART			
FINISH NONE				
COMMENTS: Make out of Architectural 6063 Aluminum U-Channel 1/8" THK, 1-1/4" High x 1-1/4" Wide				DWG. NO. REV
C-1302-001 001				SCALE: 0.200 DO NOT SCALE SHEET 1 OF 1

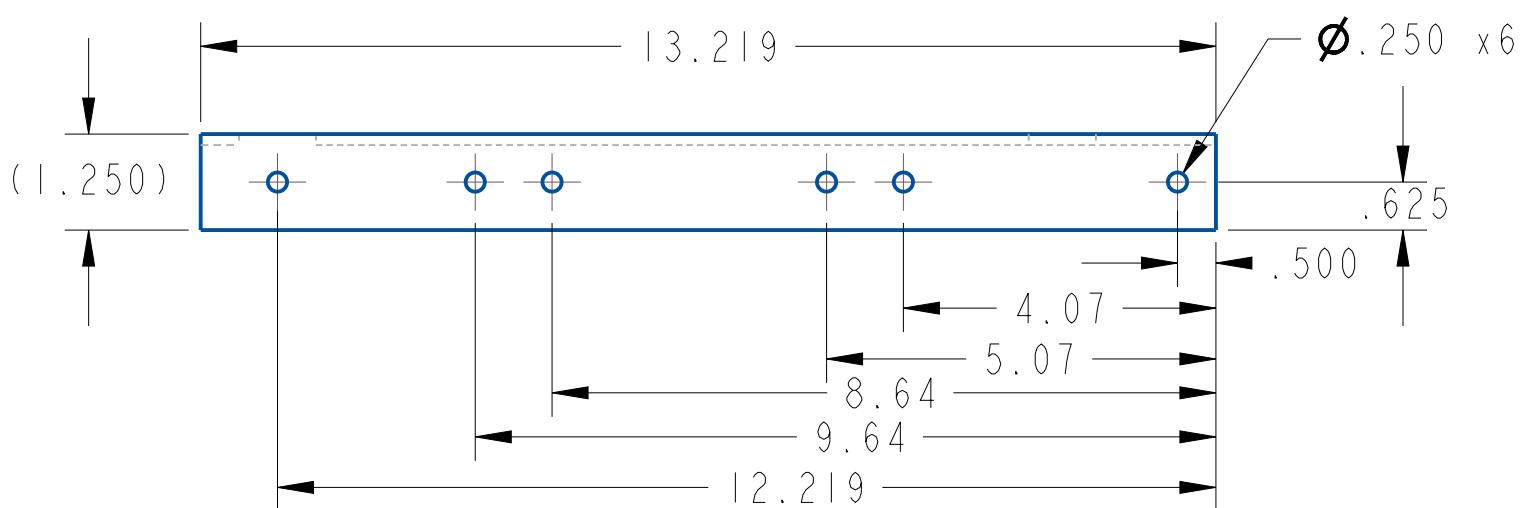
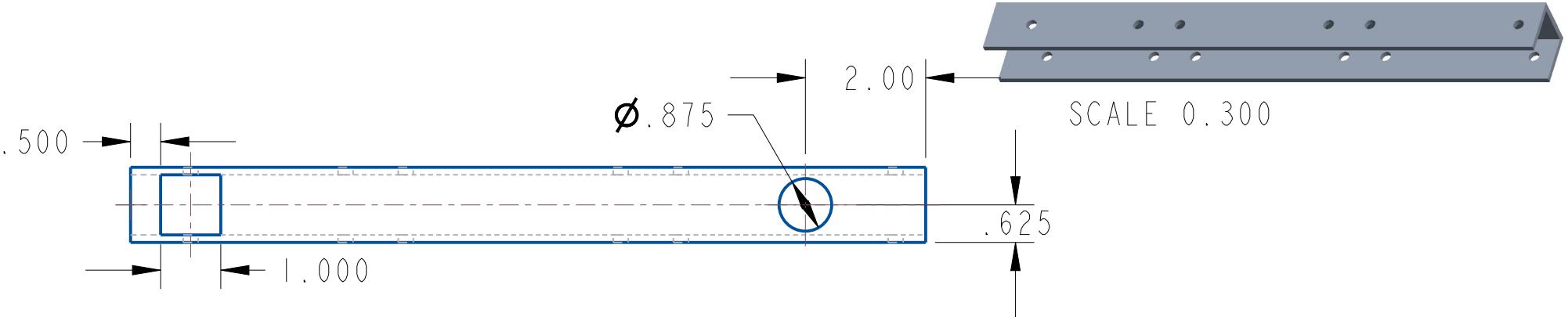
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UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

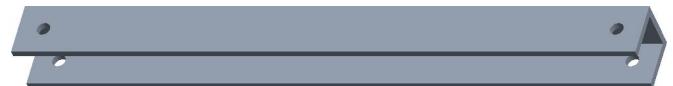


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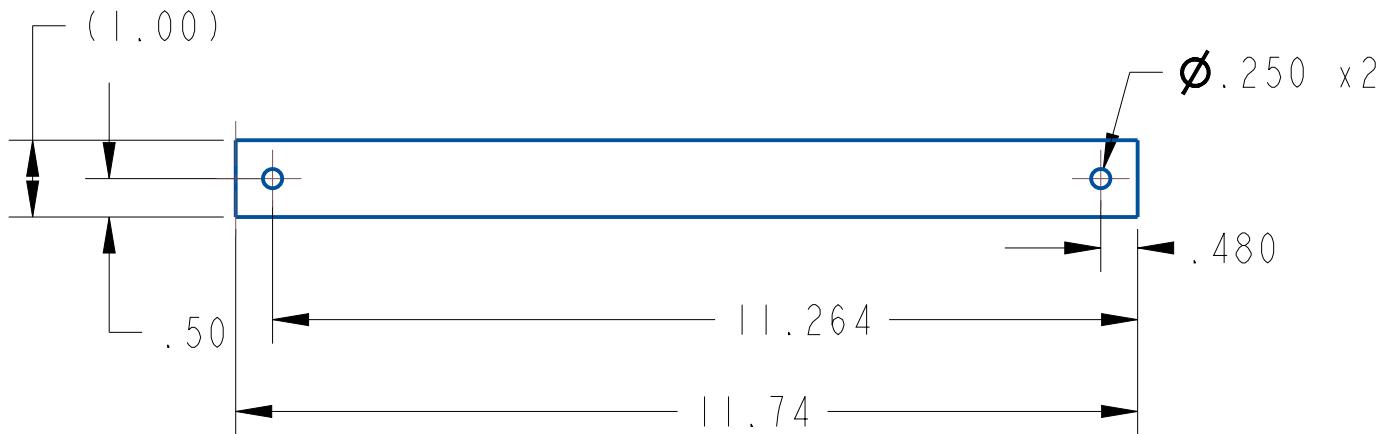
UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]
TWO PLACE DECIMAL ±0.030 [0.4]
THREE PLACE DECIMAL ±0.005 [0.2]
ANGULAR ±²
ALL FINISHES 125 OR BETTER

		NAME	DATE	TEAM NAME: NASA RMC
	DRAWN	LM	Jan-20-20	
	CHECKED			
	APPROVED			
MATERIAL 6063 AL	FINISHED PART			
FINISH NONE				
COMMENTS: Make out of Architectural 6063 Aluminum U-Channel 1/8" Thk, 1-1/4" High x 1-1/4" Wide				DWG. NO. C-1303-001
				REV 01
SCALE: 0.250 DO NOT SCALE				SHEET 1 OF 1

Back Side Member



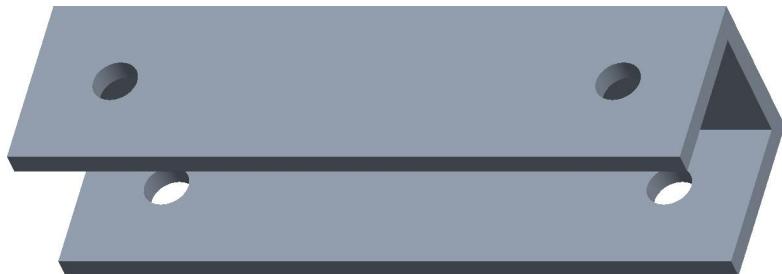
SCALE 0.300



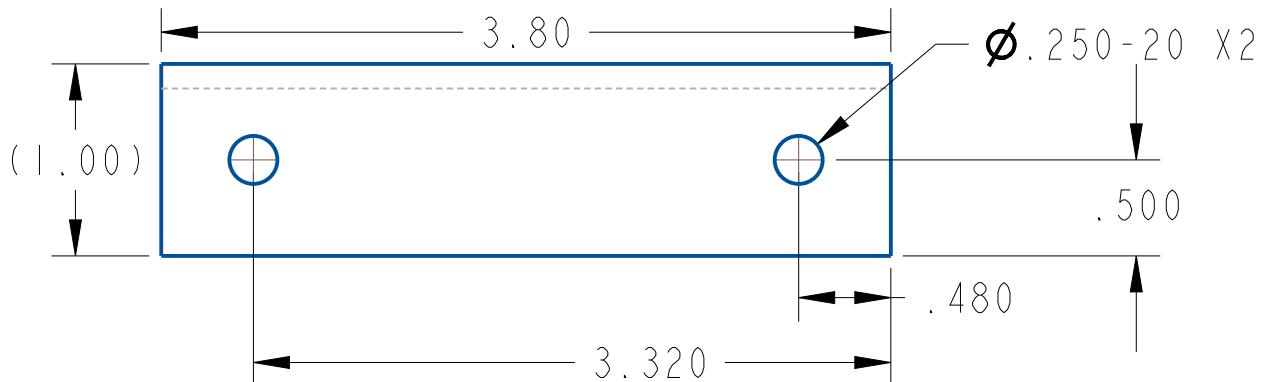
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DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.8]
TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

		NAME	DATE	TEAM NAME: NASA RMC
	DRAWN	LM	Jan-20-20	TITLE: Cross Member
	CHECKED			
	APPROVED			
COMMENTS:			DWG. NO.	REV
Architectural 6063 Aluminum U-Channel 1/8" Wall Thickness, 1" High x 1" Wide			C - 1304-001	01
SCALE: 0.200 DO NOT SCALE			SHEET 1 OF 1	



SCALE 1.000



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

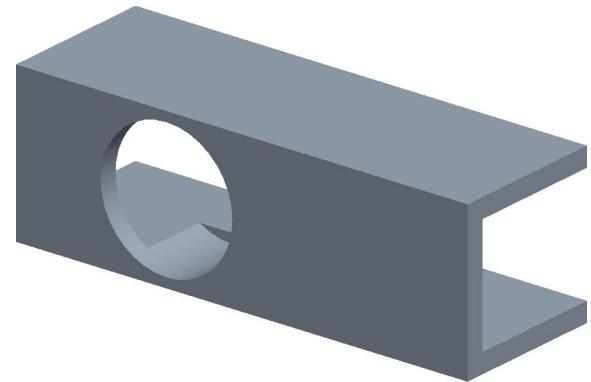
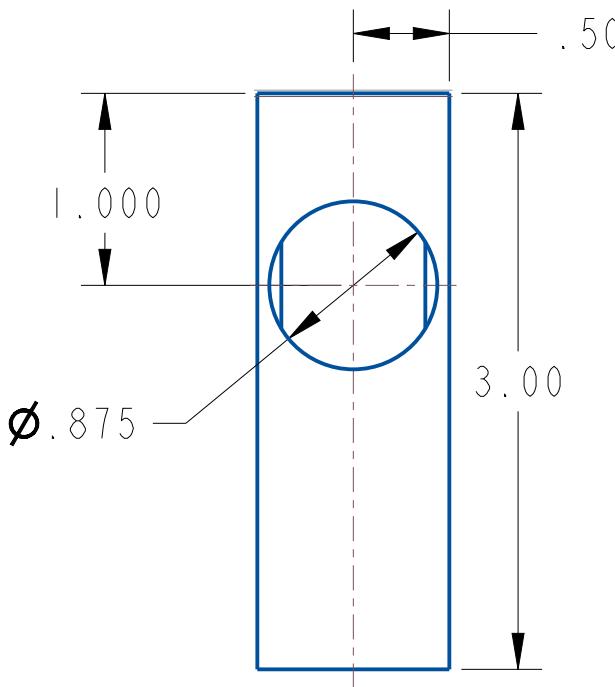
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES I25 OR BETTER

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		NAME	DATE	TEAM NAME: NASA RMC
	DRAWN	LM	Jan-20-20	
	CHECKED			
	APPROVED			
MATERIAL 6063 AL	FINISHED PART			TITLE: Connector
FINISH NONE				
COMMENTS: Make out of Architectural 6063 Aluminum U-Channel 1/8" Wall Thickness, 1" High x 1" Wide			DWG. NO.	REV
			C-1305-001	03
SCALE: 1.000 DO NOT SCALE			SHEET 1 OF 1	



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UNLESS OTHERWISE SPECIFIED:

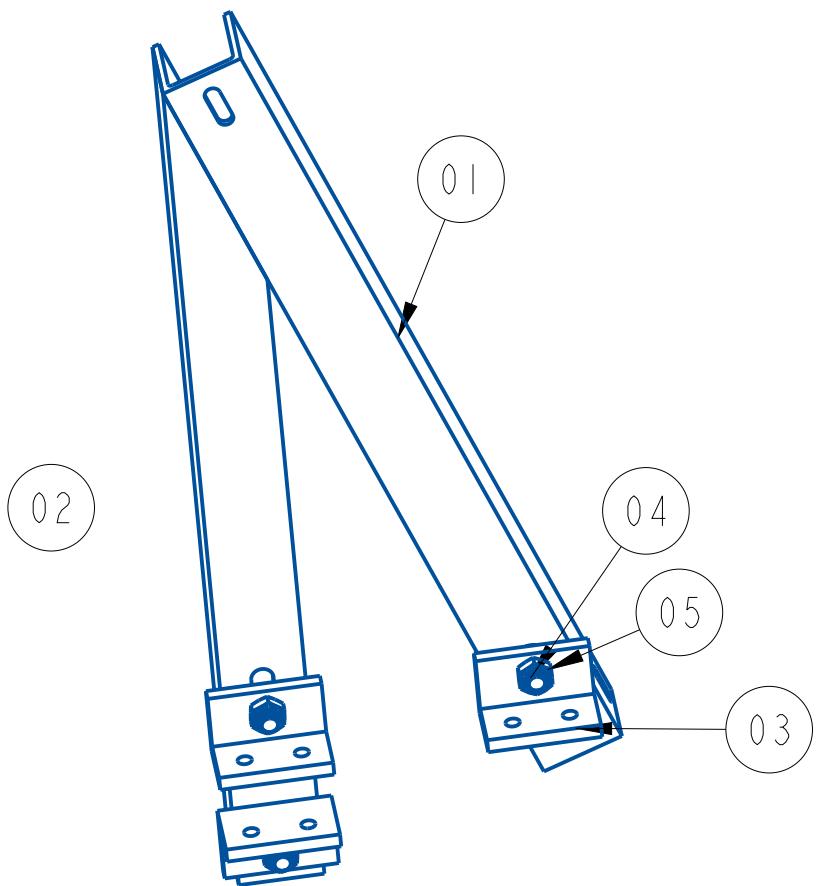
DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

		NAME	DATE	TEAM NAME: NASA RMC
	DRAWN	LM	Jan-20-20	TITLE: STIFFNER
	CHECKED			
	APPROVED			
MATERIAL 6063 AL	FINISHED PART			DWG. NO. C-1307-001
FINISH NONE				REV 01
COMMENTS: Make out of Architectural 6063 Aluminum U-Channel 1/8" Wall Thickness, 1" High x 1" Wide	SCALE: 1.000	DO NOT SCALE	SHEET 1 OF 1	

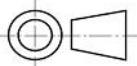
ITEM NO.	DESCRIPTION	QTY.
01	Front-Support	2
02	Back-Support	2
03	Bracket	6
04	3/8"-16 x 3/4"	3
05	Nut 3/8"-16 x 17/64"	3



SCALE 0.300

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REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.8]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



MATERIAL 6063 AL

FINISH NONE

COMMENTS:

ITEMs: 01, 02, 03, 04 is same as Items 01, 03
, 04 in C-1100-001

NAME: LM
DATE: Jan-20-20
TEAM NAME:
NASA RMC

TITLE:

Delivery Support

DWG. NO.

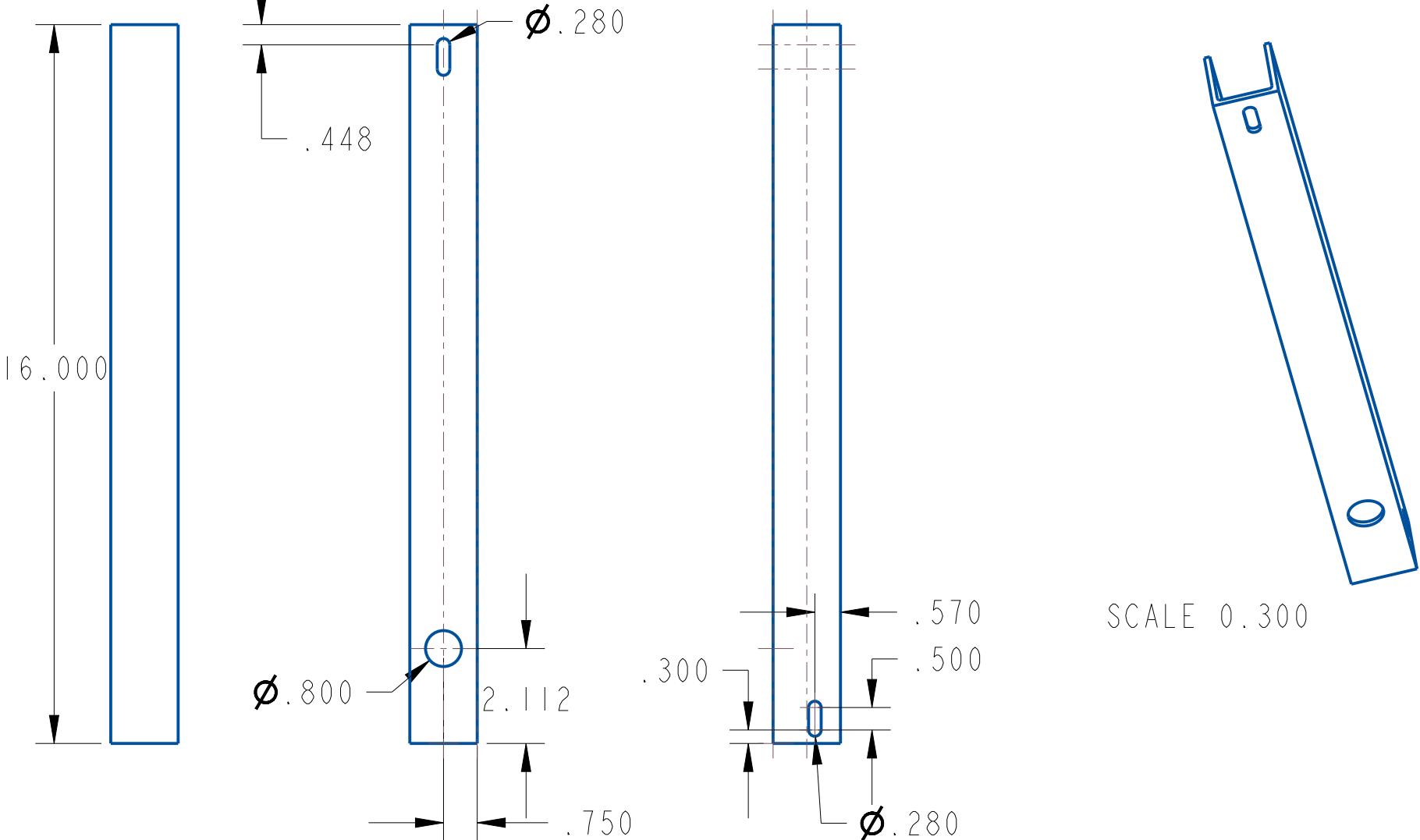
C-1200-001

REV

001

SCALE: 0.125 DO NOT SCALE

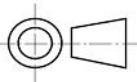
SHEET 1 OF 1

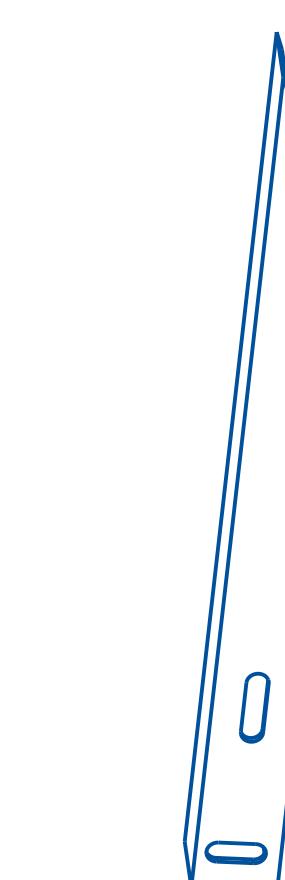
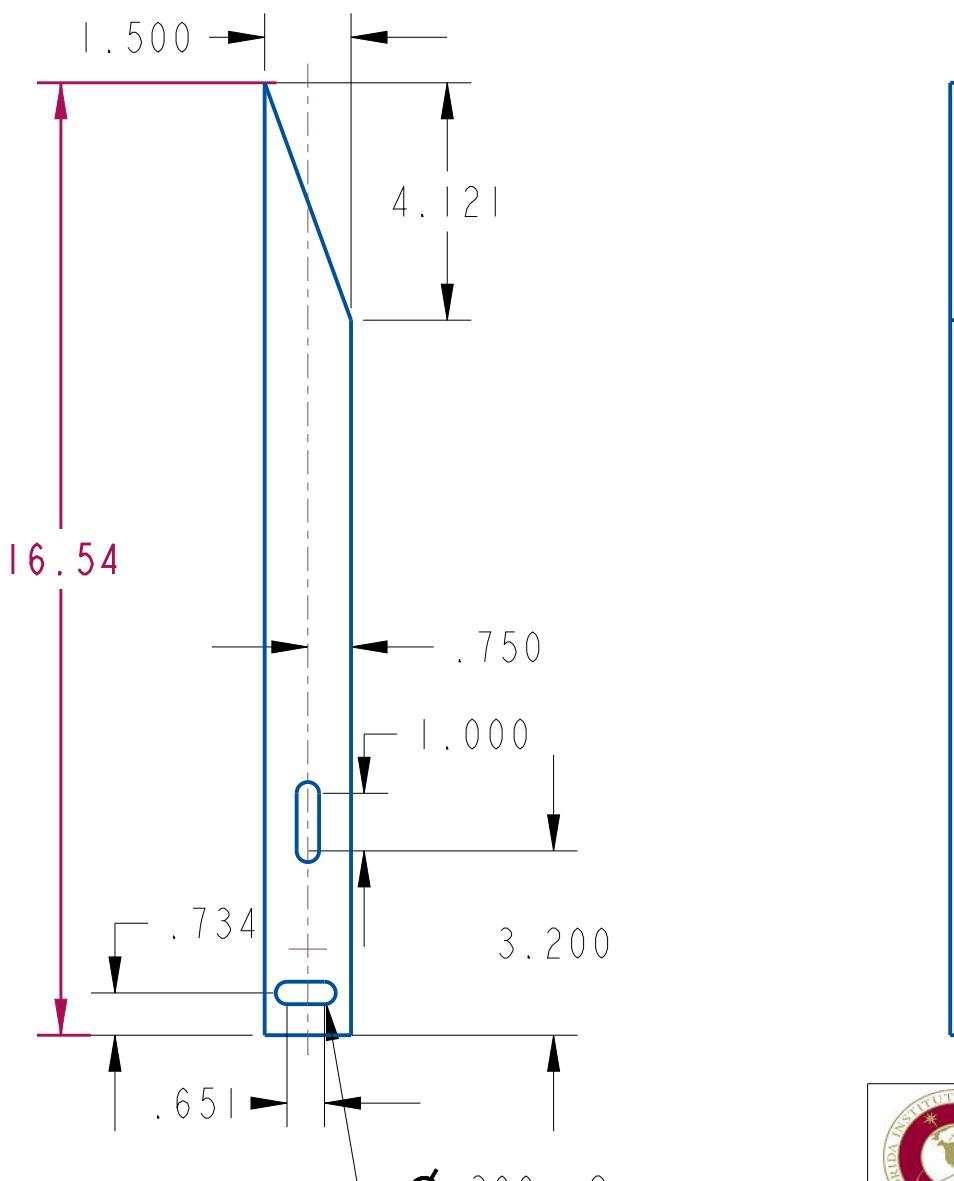


		NAME	DATE	TEAM NAME:
	DRAWN	LM	Jan-20-20	NASA RMC
	CHECKED			
	APPROVED			
TITLE:		Excavation Front Support		
MATERIAL 6063 AL	FINISHED PART			
FINISH NONE				
COMMENTS:		DWG. NO.	REV	
Make out of Aluminum U-Shaped Channel Stock /U-Channel , 6063AL, 1 1/2 Leg, 1 1/2 Inx8 ft		C-1101-001	01	
SCALE: 0.200 DO NOT SCALE		SHEET 1 OF 1		

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REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



MATERIAL 6063 AL

FINISH NONE

COMMENTS:

Make out of
Aluminum U-Shaped Channel Stock /U-Channel
, 6063AL, 1 1/2 Leg, 1 1/2 Inx8 ft

NAME: NASA RMC

TITLE:

Excavation Back Support

DWG. NO.

C-1102-001

REV

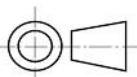
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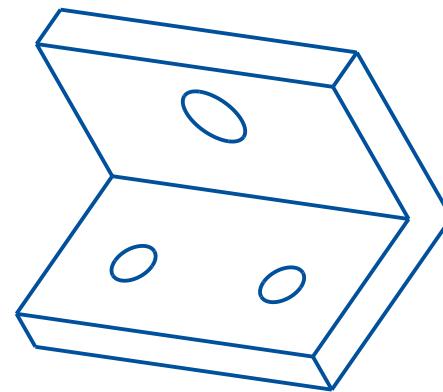
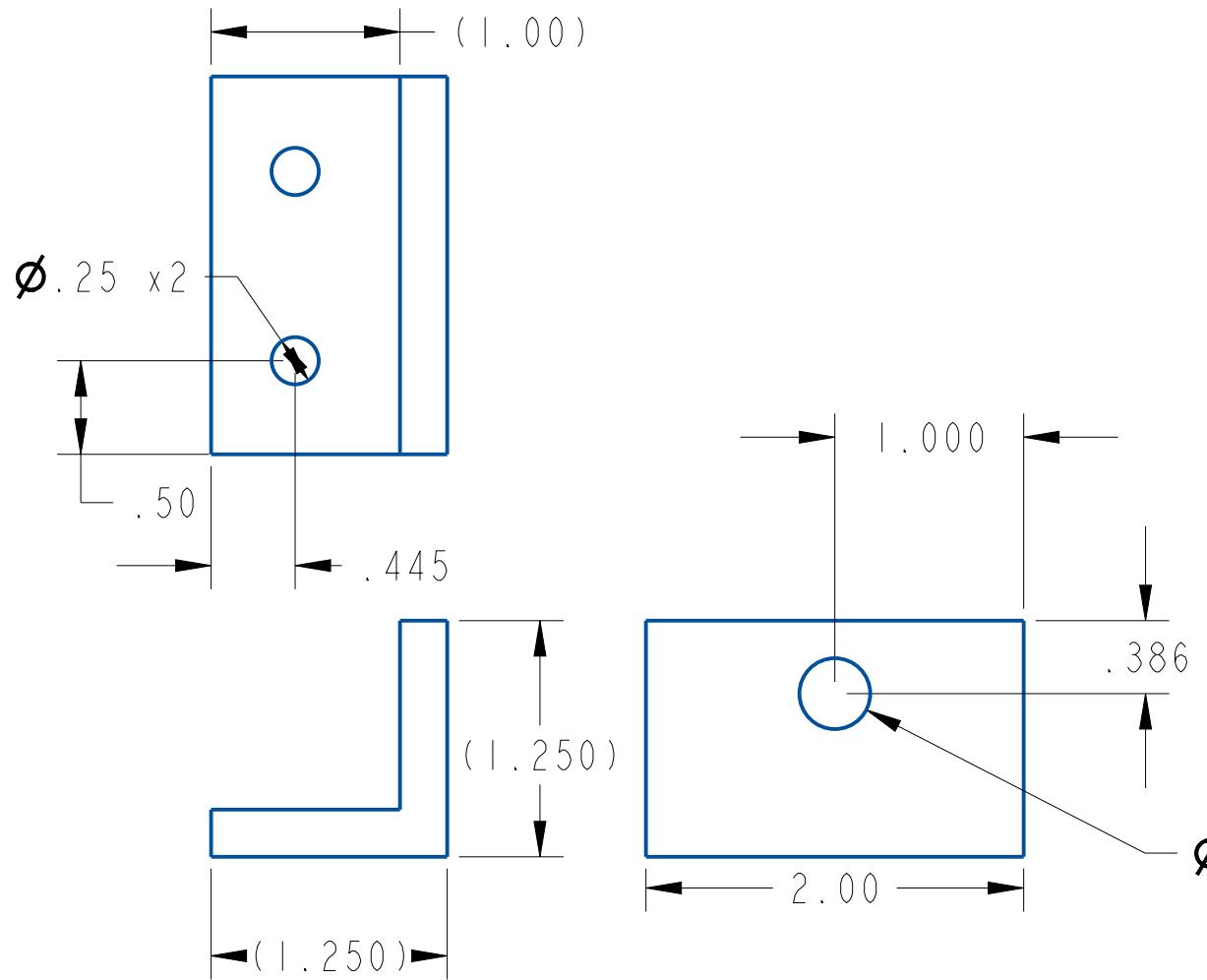
SCALE: 0.167 DO NOT SCALE

SHEET 1 OF 1

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REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

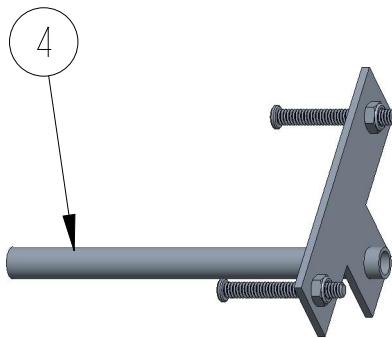
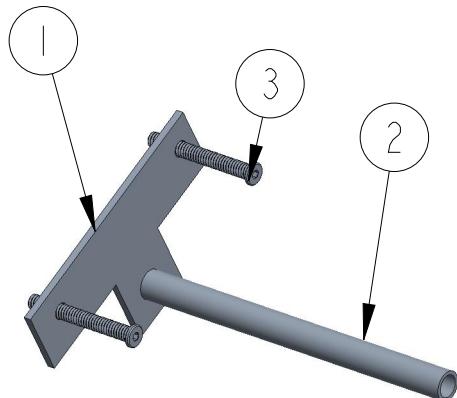
TWO PLACE DECIMAL ±0.030 [0.4]
THREE PLACE DECIMAL ±0.005 [0.2]
ANGULAR ±²₆
ALL FINISHES 125 OR BETTER

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		NAME	DATE	TEAM NAME: NASA RMC
	DRAWN	LM	Jan-20-20	
	CHECKED			
	APPROVED			
MATERIAL 6063 AL	FINISHED PART			TITLE: Bracket
FINISH NONE				DWG. NO. C-1203-001
COMMENTS: Make out of Multipurpose 6061 Aluminum 90 Degree Angle with Round Edge, 1/4" Thickness, 1" Outside Height			REV 01	
SCALE: 1.000 DO NOT SCALE			SHEET 1 OF 1	

ITEM#	DESCRIPTION	QTY.
1	Extrusion Support	2
2	Extrusion Rod_LHS	1
3	1/4-20 Screw	4
4	Extrusion Rod_RHS	1

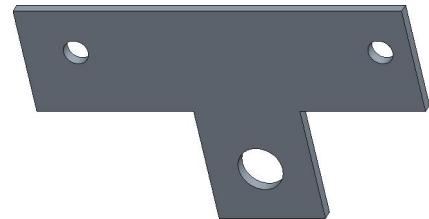
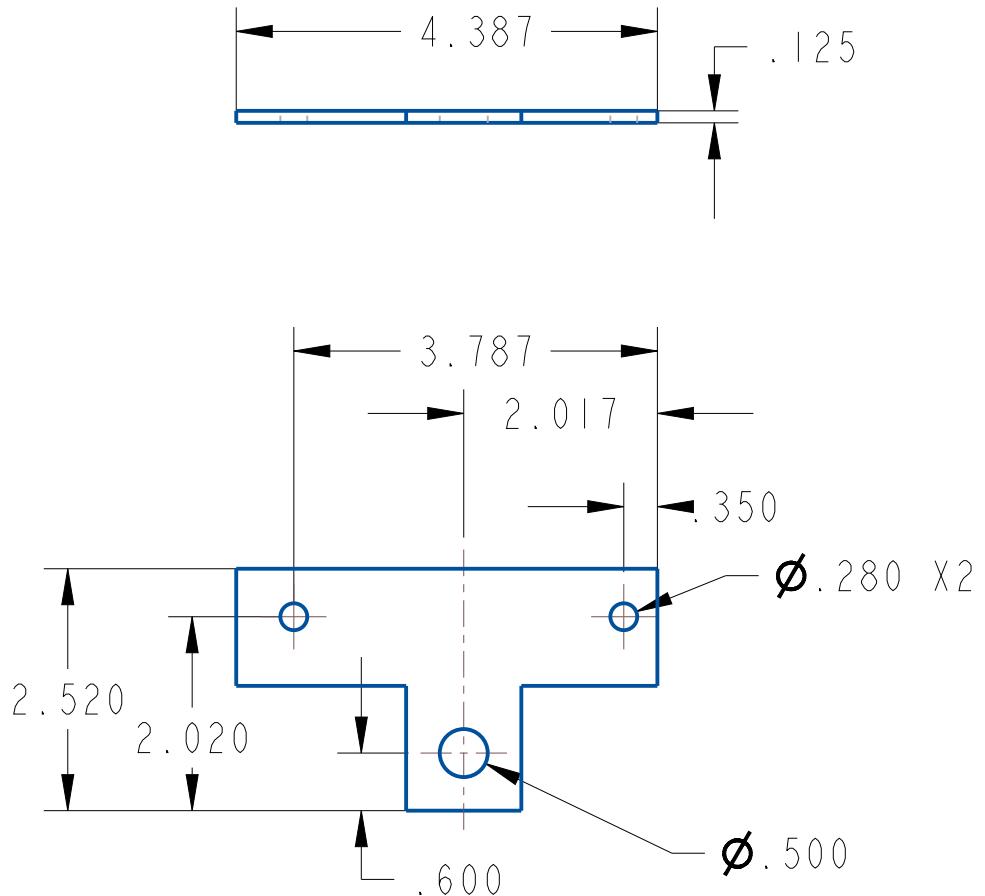


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REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 [0.81]
TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^{\circ}$
ALL FINISHES 125 OR BETTER



MATERIAL 6061 AL	NAME	DATE	TEAM NAME: NASA RMC
FINISH NONE	DRAWN	LM	Mar-12-20
	CHECKED		
	APPROVED		
COMMENTS:			DWG. NO. C-1400
			REV 01
SCALE: 0.045 DO NOT SCALE			SHEET 1 OF 4



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REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.8]
TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^{\circ}$
ALL FINISHES 125 OR BETTER



MATERIAL 6061 AL

FINISH NONE

COMMENTS:

TEAM NAME:
NASA RMC

TITLE:

Extrusion Support

DWG. NO.

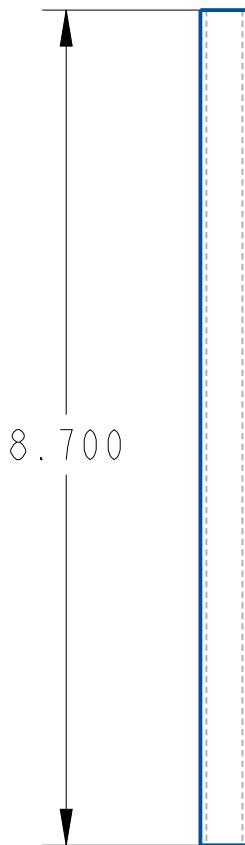
C-1401

REV

01

SCALE: 0.333 DO NOT SCALE

SHEET 2 OF 4



$\phi .50$

$\phi .375$

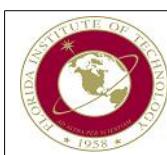
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UNLESS OTHERWISE SPECIFIED:

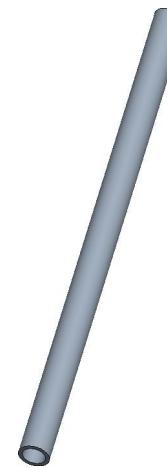
DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

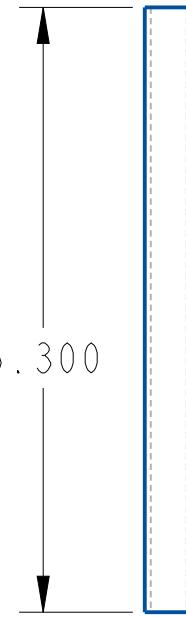
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^{\circ}$
ALL FINISHES 125 OR BETTER



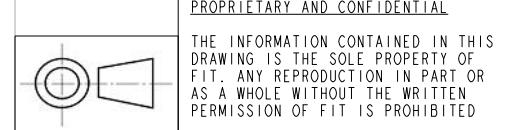
MATERIAL 6061 AL	NAME	DATE	TEAM NAME: NASA RMC
	DRAWN	LM	Mar-12-20
	CHECKED		
	APPROVED		
COMMENTS:			DWG. NO.
			C - 1402
SCALE: 0.500 DO NOT SCALE			REV 01
			SHEET 3 OF 4





$\phi .50$

$\phi .375$



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^{\circ}$
ALL FINISHES 125 OR BETTER



MATERIAL 6061 AL

FINISH NONE

COMMENTS:

NAME

DATE

TEAM NAME:

NASA RMC

TITLE:

Extrusion Rod_RHS

DWG. NO.

C - 1404

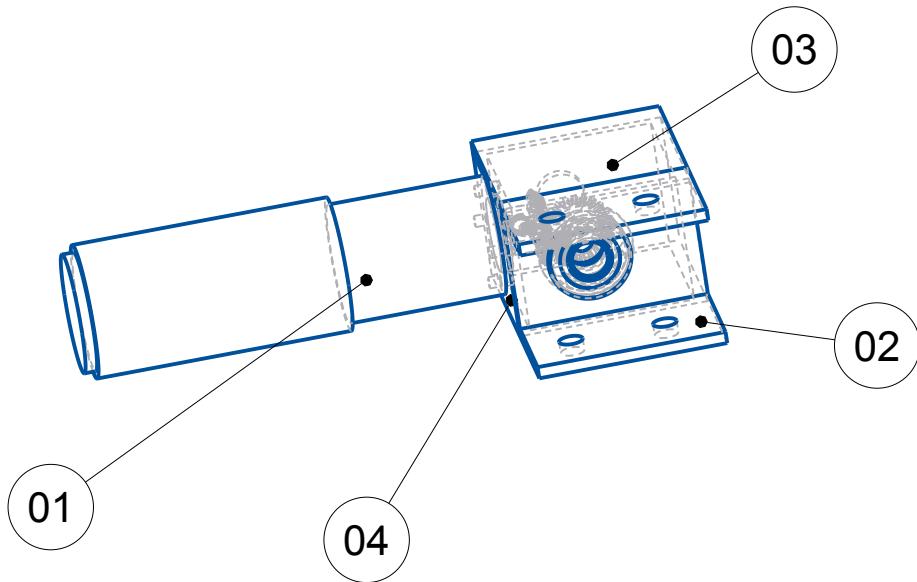
REV

01

SCALE: 0.333

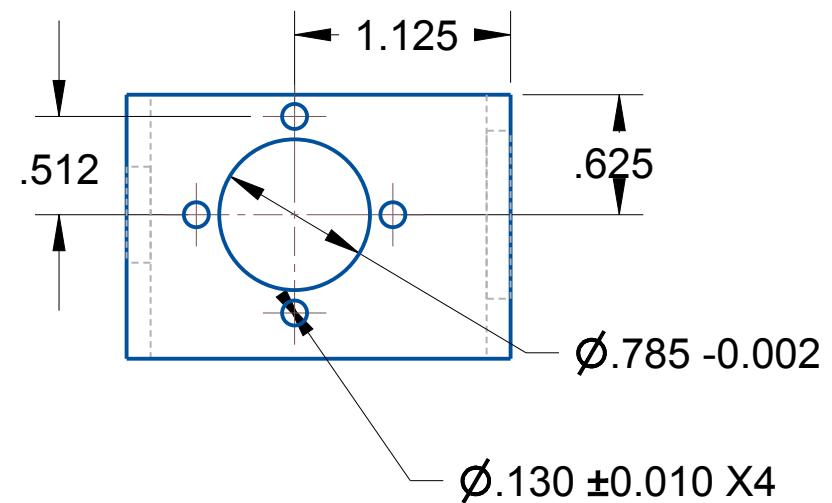
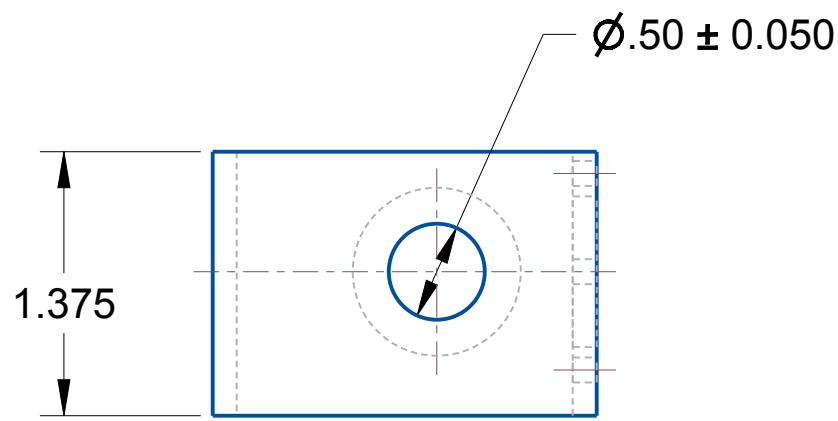
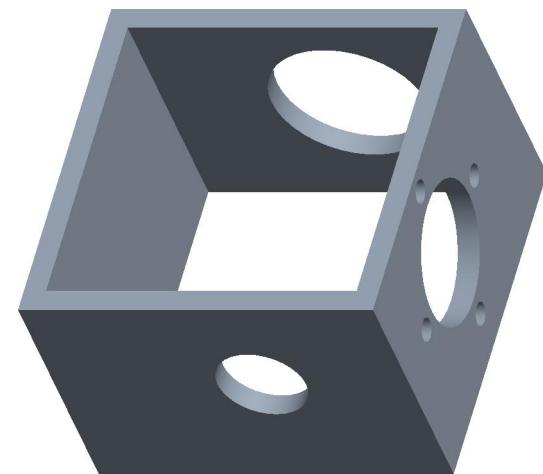
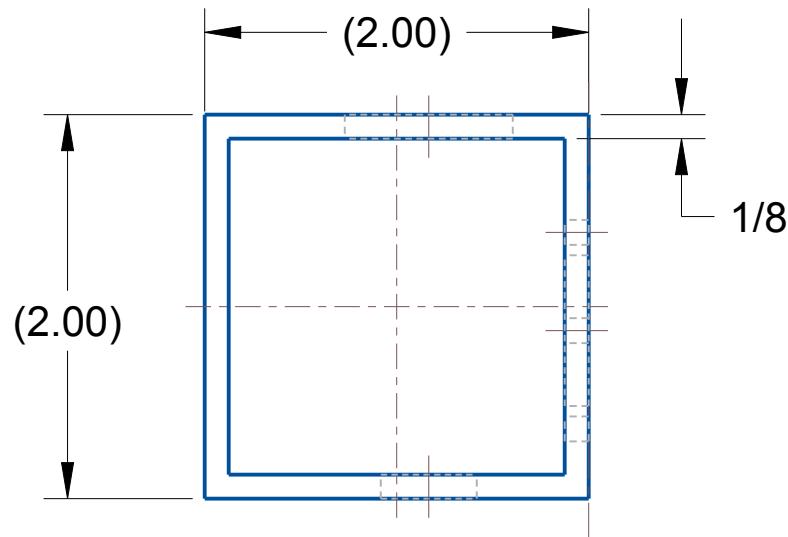
DO NOT SCALE

SHEET 4 OF 4

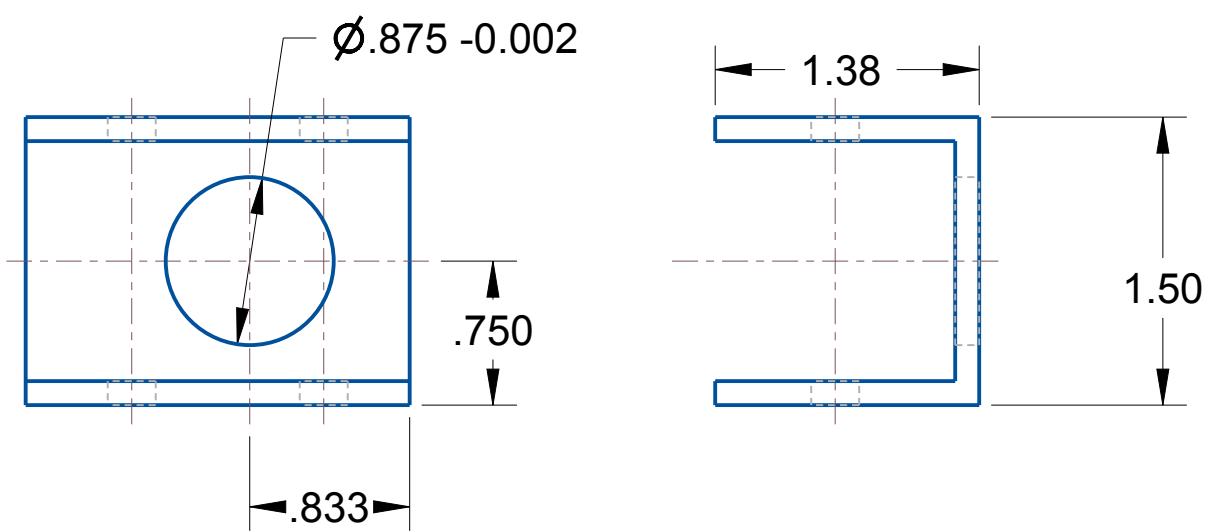
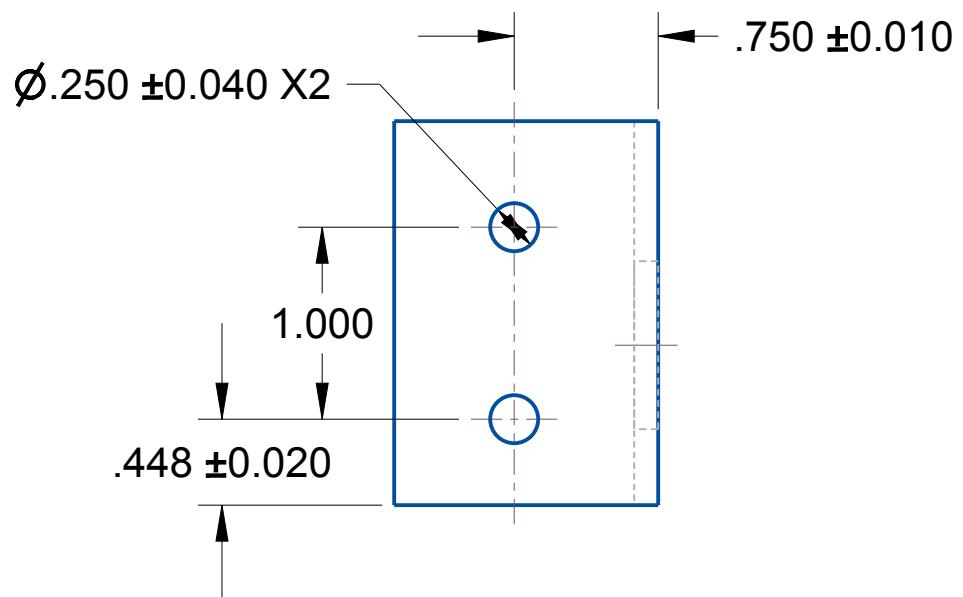
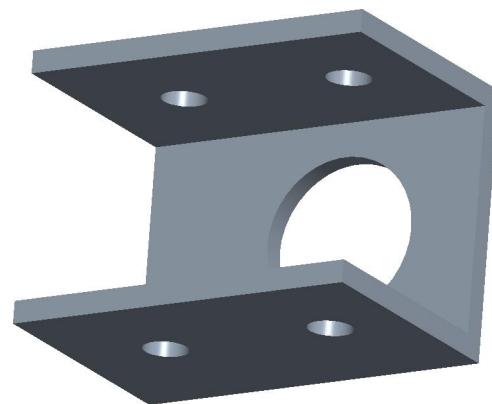


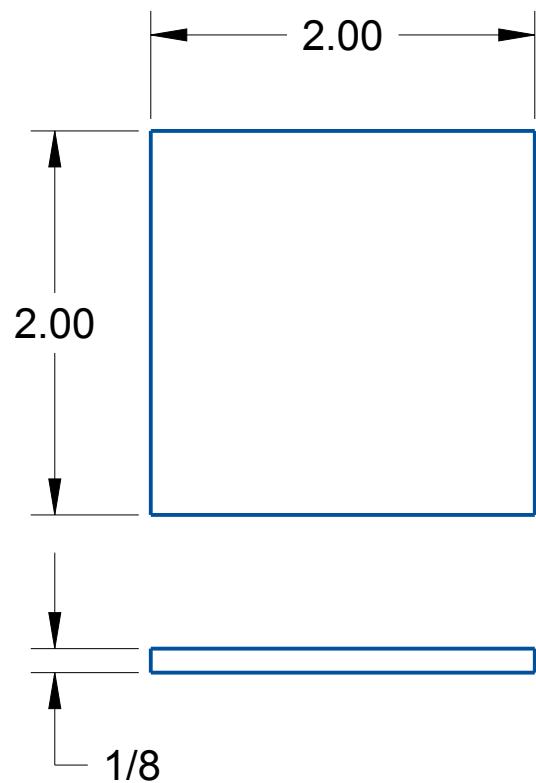
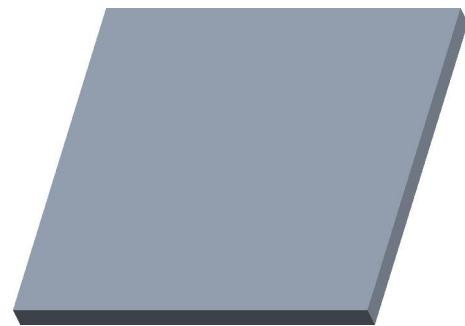
ITEM NO.	DESCRIPTION	QTY.
01	Motor	1
02	C-Channel	1
03	Cap	1
04	2x2 Sq_GearBox	1

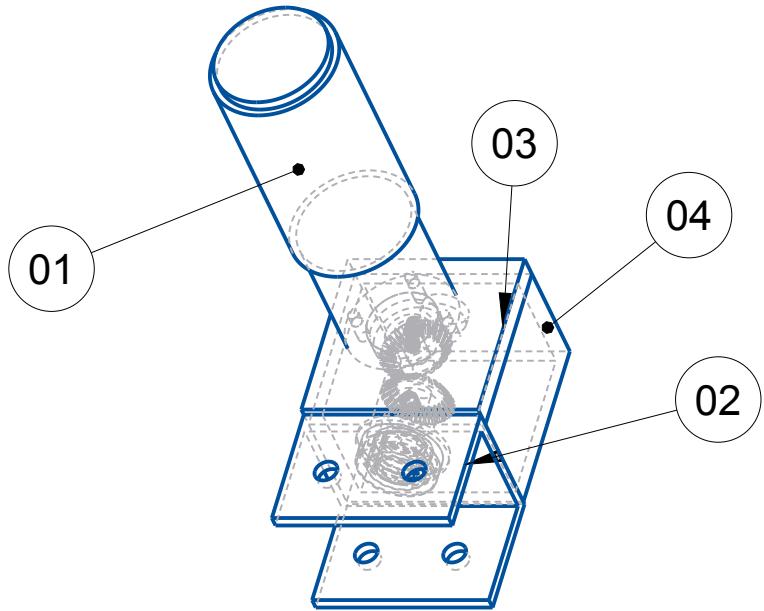
SCALE 0.500



Motor Screw holes are clearance holes

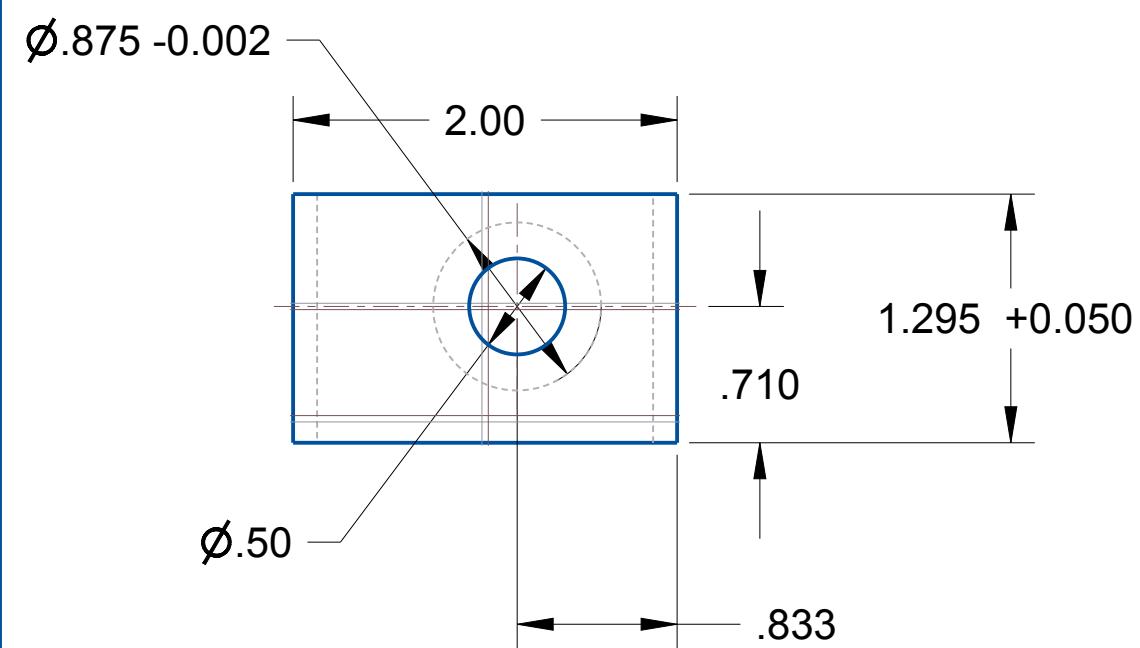
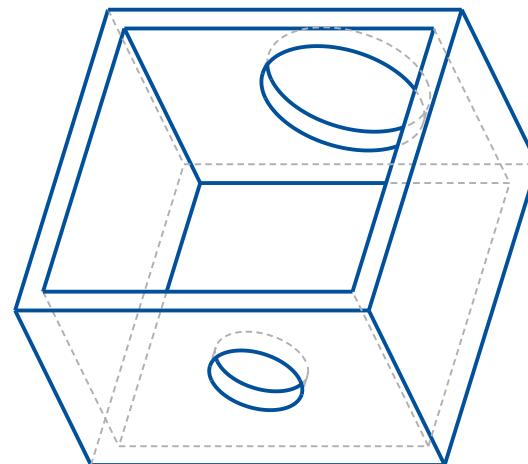
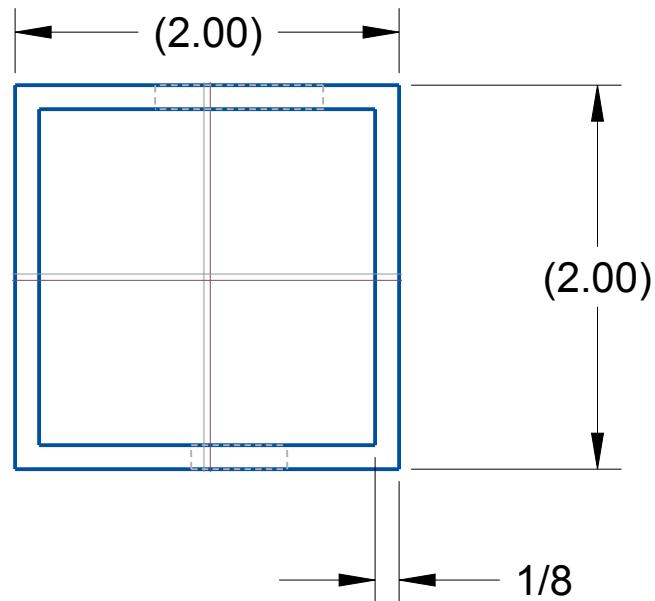


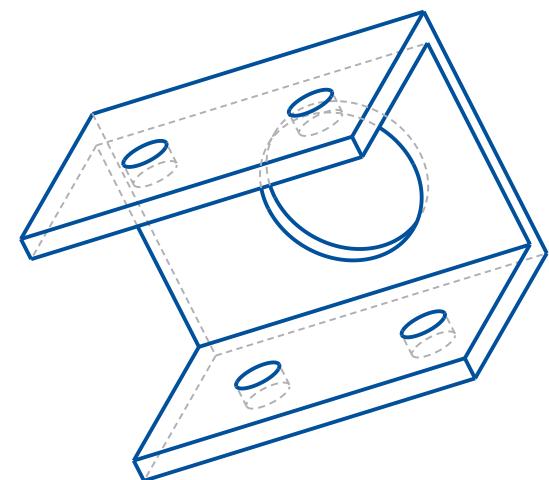
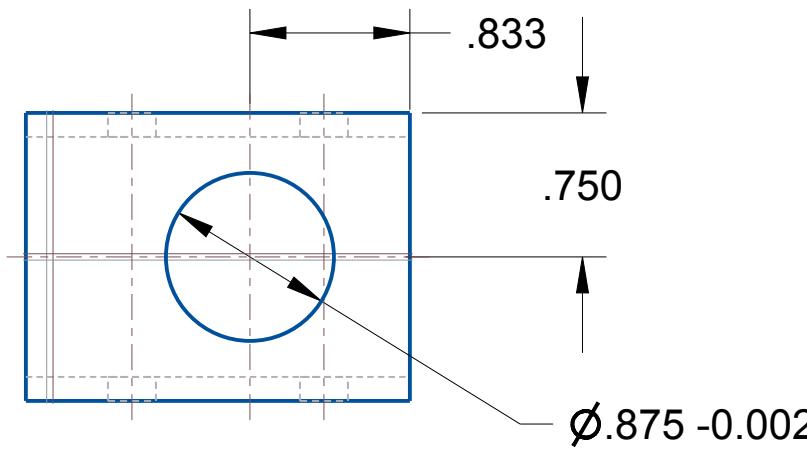
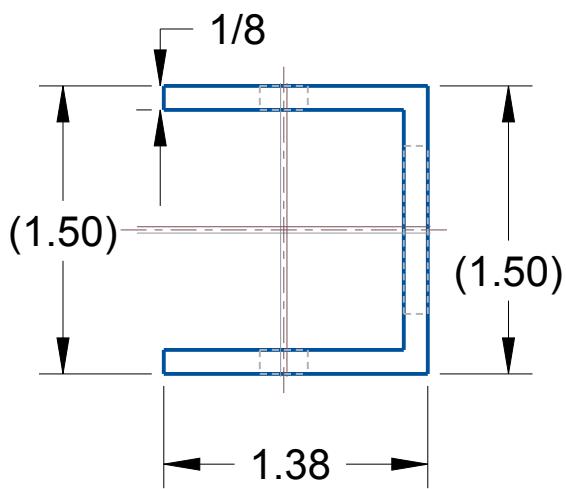
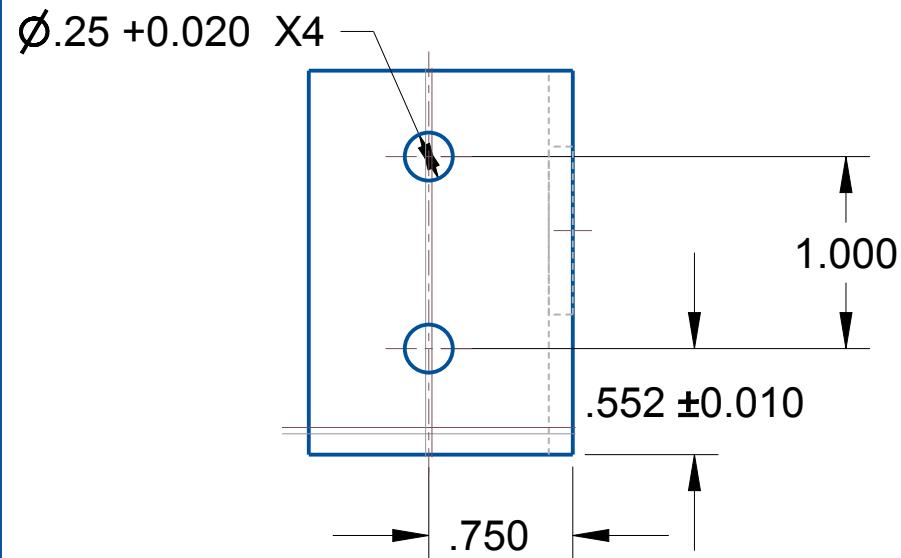


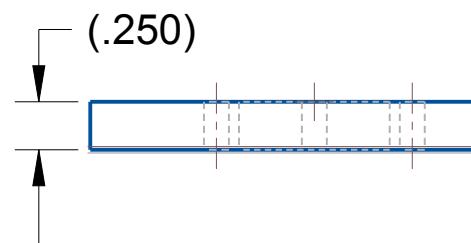
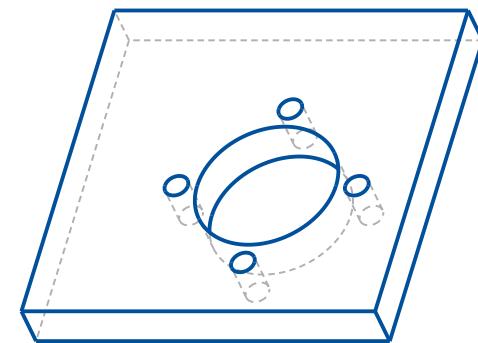
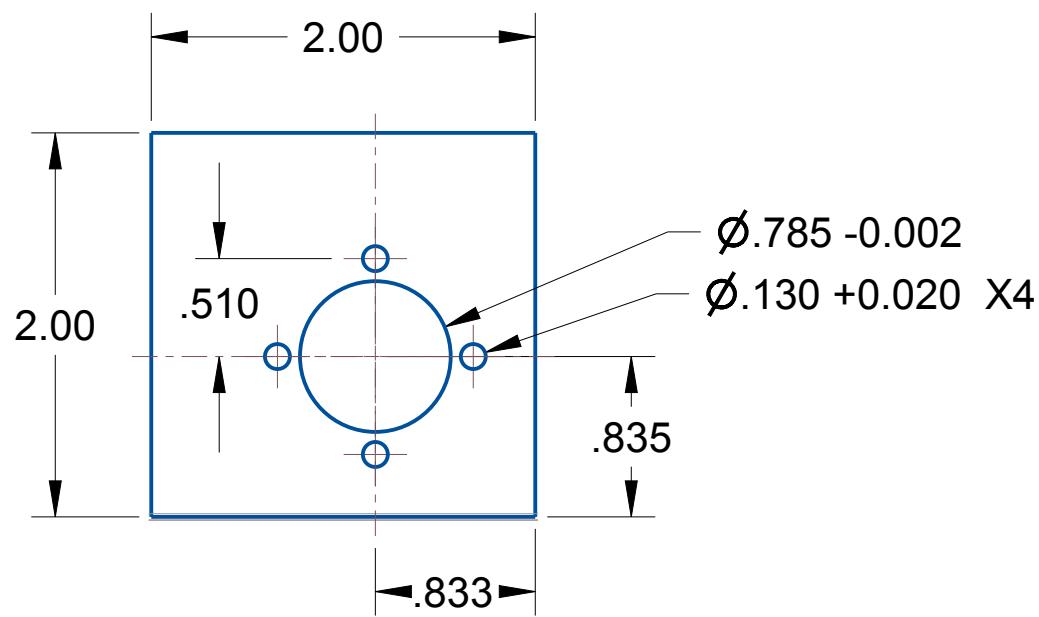


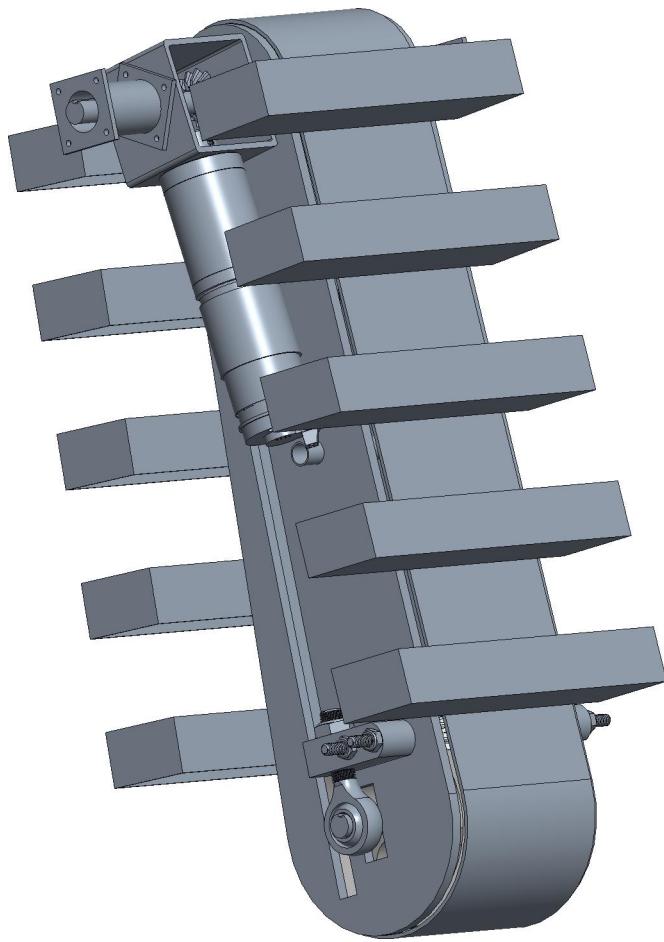
SCALE 0.500

ITEM NO.	DESCRIPTION	QTY.
01	Motor	1
02	C-Channel	1
03	Cap	1
04	2x2 Sq_GearBox	1



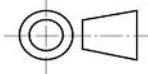






SCALE 0.250

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AS A WHOLE WITHOUT THE WRITTEN
PERMISSION OF FIT IS PROHIBITED



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



MATERIAL NONE

FINISH NONE

COMMENTS:

DRAWN AS

CHECKED

APPROVED

NAME

DATE

TEAM NAME:

NASA RMC

TITLE:

EXCAVATION BELT
ASSEMBLY

DWG. NO.

X-1000

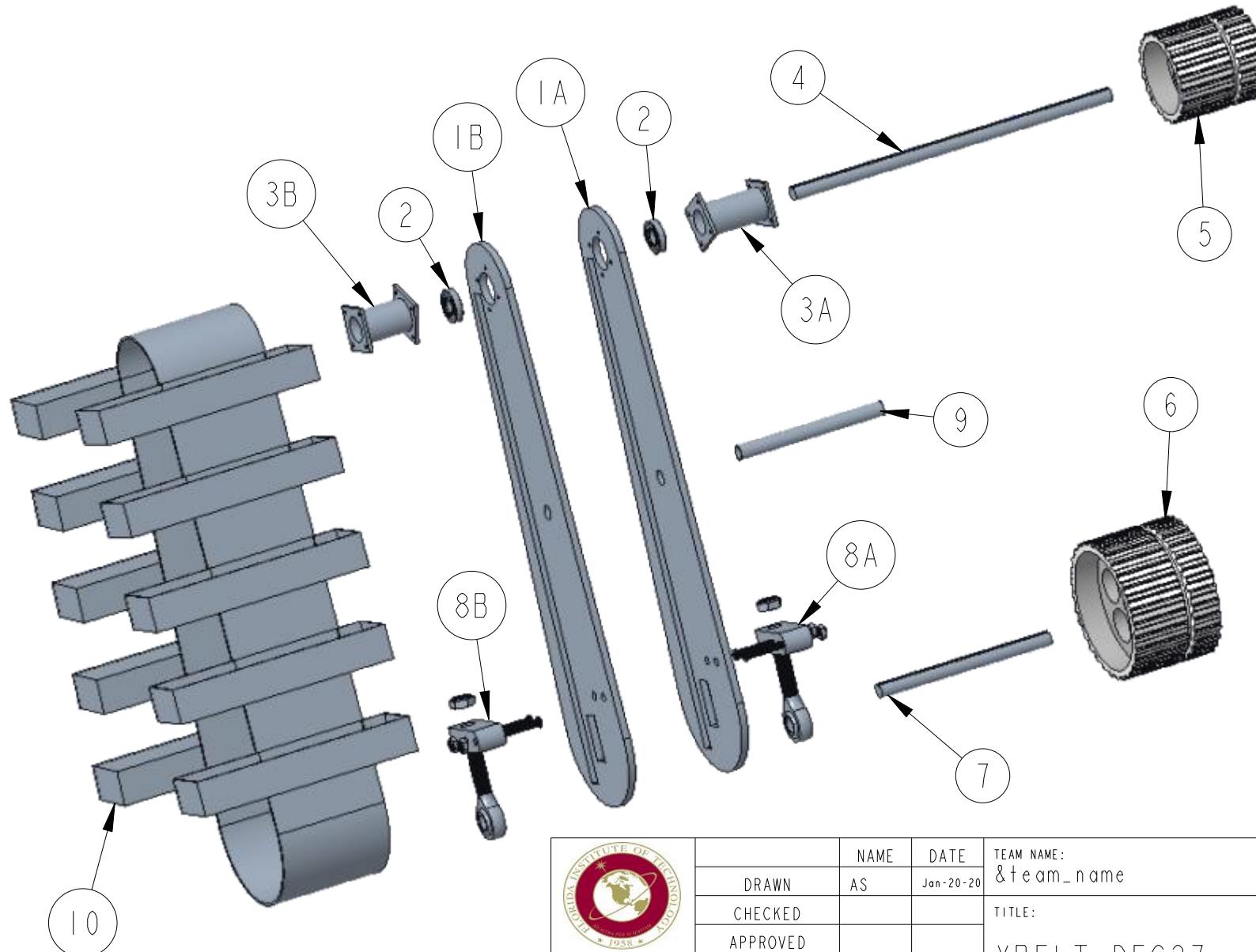
REV

002

SCALE: 0.083

DO NOT SCALE

SHEET 1 OF 10



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

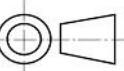
TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



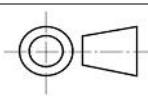
MATERIAL	None	NAME	DATE	TEAM NAME: &team_name
DRAWN	AS		Jan-20-20	
CHECKED				
APPROVED				
TITLE:				XBELT_DEC27
DWG. NO.				REV
DRW0003				002
SCALE: 0.083 DO NOT SCALE				SHEET 2 OF 10

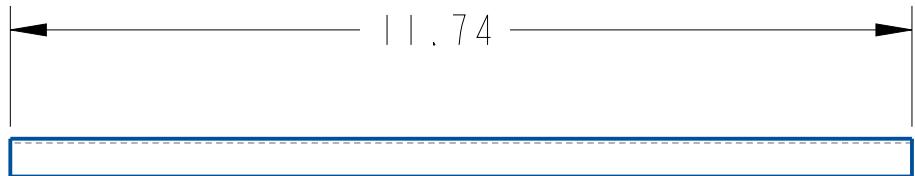
PROPRIETARY AND CONFIDENTIAL

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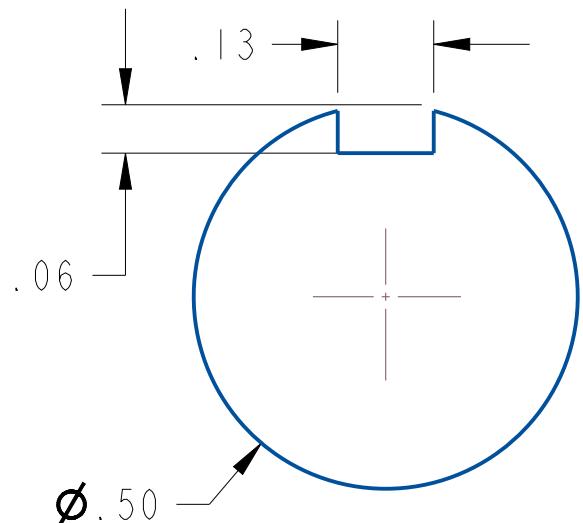
Item #	Drawing #	Description	Qty
1A	X-1010-001	Side Plate (RHS)	1
1B	X-1010-002	Side Plate (LHS)	1
2	X-1020	Bearings	2
3A	X-1030-001	Top Shaft Cover (RHS)	1
3B	X-1030-002	Top Shaft Cover (LHS)	1
4	X-1040	Top Shaft	1
5	X-1050	Top Sprocket	1
6	X-1060	Bottom Sprocket	1
7	X-1070	Bottom Shaft	1
8A	X-1080-001	Tension Assembly (RHS)	1
8B	X-1080-001	Tension Assembly (LHS)	1
9	X-1090-001	Center Support Rod	1
10	X-1100	Buckets	10

 <p>PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIT. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIT IS PROHIBITED</p>	<p><u>UNLESS OTHERWISE SPECIFIED:</u> DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 [0.8] TWO PLACE DECIMAL ± 0.030 [0.4] THREE PLACE DECIMAL ± 0.005 [0.2] ANGULAR $\pm 2^{\circ}$ ALL FINISHES 125 OR BETTER</p>	 <p>FLORIDA INSTITUTE OF TECHNOLOGY ESTABLISHED 1958</p>		NAME	DATE	TEAM NAME: &team_name
			DRAWN	AS	Jan-20-20	TITLE: TOP_SHAFT_B
			CHECKED			
			APPROVED			
		MATERIAL AL 6061	FINISHED PART		DWG. NO. DRW0003	REV 002
		FINISH NONE				
		COMMENTS:				
SCALE: 0.200	DO NOT SCALE	SHEET 3 OF 10				



SCALE 0.400

Left

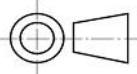


SCALE 4.000

Front

PROPRIETARY AND CONFIDENTIAL

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UNLESS OTHERWISE SPECIFIED:

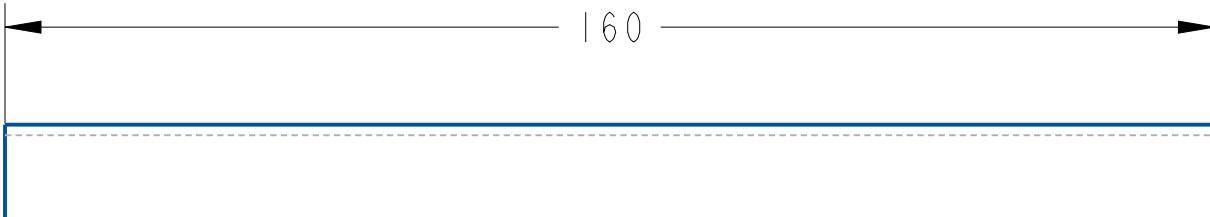
DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

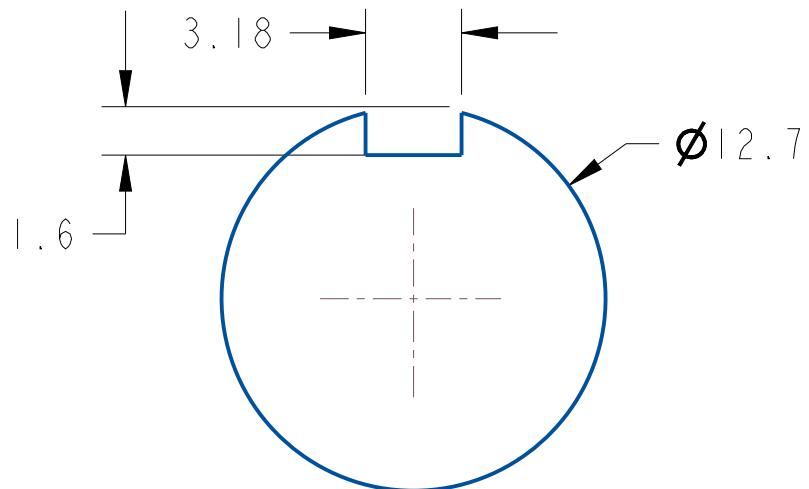


		NAME	DATE	TEAM NAME: &team_name
	DRAWN	AS	Jan-20-20	
	CHECKED			
	APPROVED			
MATERIAL	1045 carbon	FINISHED PART	TITLE: XBELT_DEC27	
FINISH	NONE		DWG. NO.	
COMMENTS:				REV
DRW0003				002
SCALE: 0.083 DO NOT SCALE				SHEET 4 OF 10



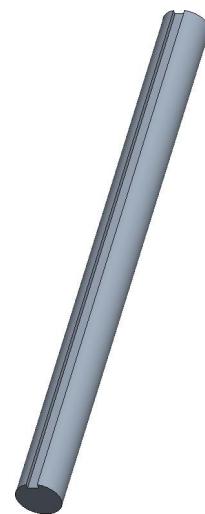
SCALE 1.000

Left



SCALE 4.000

Front



MATERIAL 1045 carbon steel

FINISH NONE

COMMENTS:

FINISHED PART

TEAM NAME:
&team_name

TITLE:

TOP SHAFT_B

DWG. NO.

DRW0003

REV

002

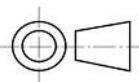
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DO NOT SCALE

SHEET 5 OF 10

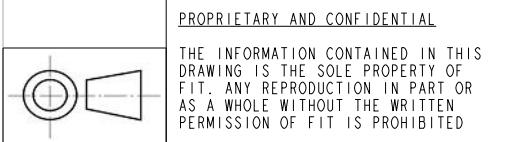
PROPRIETARY AND CONFIDENTIAL

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SCALE 0.300



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



MATERIAL AL 6061

FINISH NONE

COMMENTS: Refer to note & manufacturing plan

DRAWN AS

CHECKED

APPROVED

NAME

DATE

Jan-20-20

TEAM NAME:
&team_name

TITLE:

BOTTOM_SHAFT_B

DWG. NO.

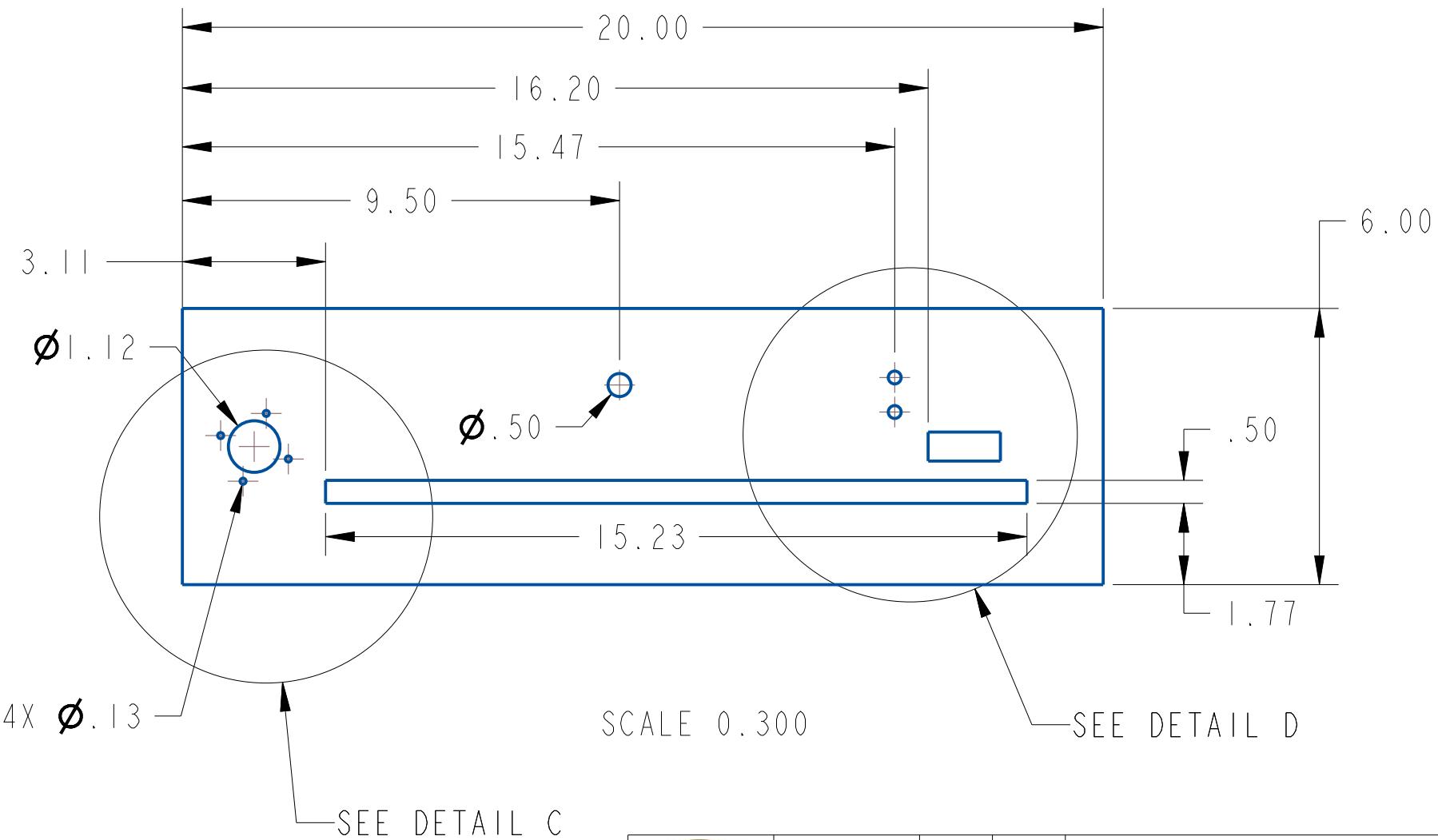
DRW0003

REV

002

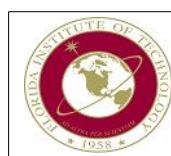
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SHEET 6 OF 10



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UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS
REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 (.81)
TWO PLACE DECIMAL ±0.030 [.4]
THREE PLACE DECIMAL ±0.005 [.02]
ANGULAR ±2°
ALL FINISHES 125 OR BETTER

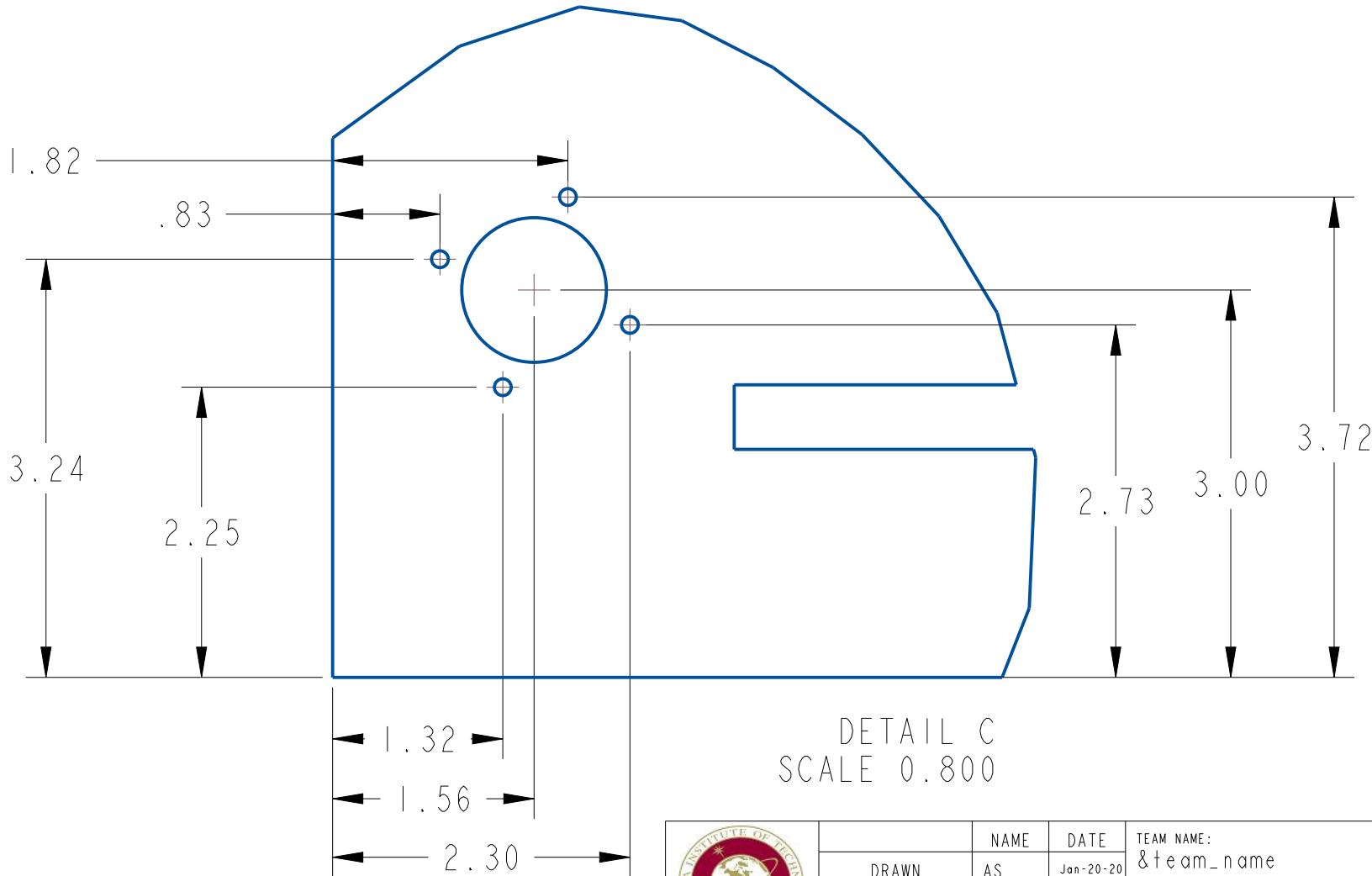


MATERIAL AI 6061

FINISH NONE

COMMENTS:

DRAWN AS	NAME	DATE	TEAM NAME: &team_name
CHECKED			TITLE:
APPROVED			BOTTOM_SHAFT_B
DWG. NO.			REV
DRW0003			002
SCALE: 0.500 DO NOT SCALE		SHEET 7 OF 10	



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 (.81)

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



MATERIAL AI 6061

FINISH NONE

COMMENTS:



DRAWN AS

CHECKED

APPROVED

FINISHED PART

TEAM NAME:
&team_name

TITLE:

SIDE_PLATE_FEATURES

DWG. NO.

DRW0003

REV

002

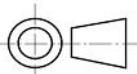
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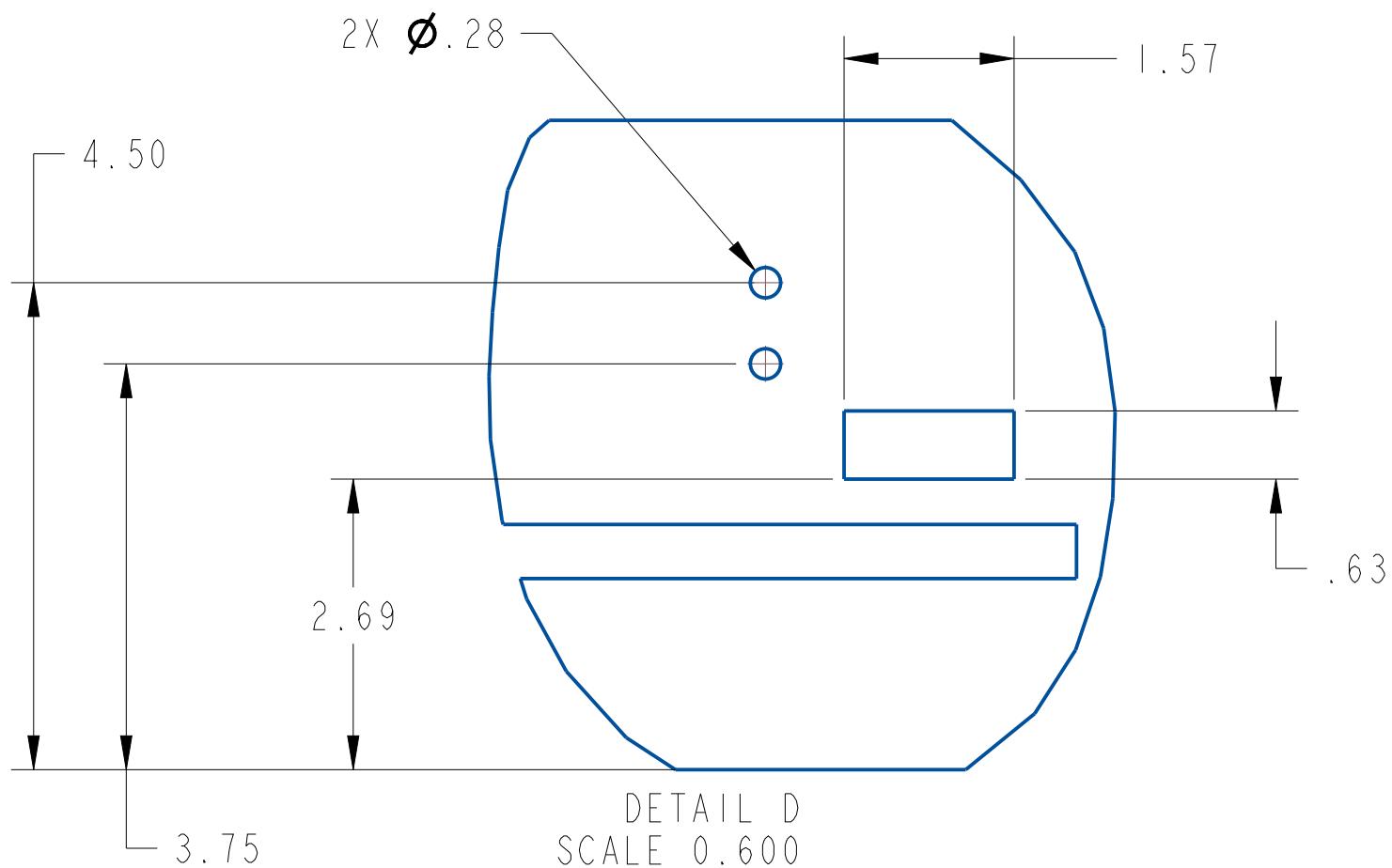
DO NOT SCALE

SHEET 8 OF 10

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UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS
REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 (.81)
TWO PLACE DECIMAL ±0.030 [.4]
THREE PLACE DECIMAL ±0.005 [.02]
ANGULAR ± 2°
ALL FINISHES 125 OR BETTER



MATERIAL AL 6061

FINISH NONE

COMMENTS:

DRAWN AS Jan-20-20

CHECKED

APPROVED

FINISHED PART

TEAM NAME:
&team_name

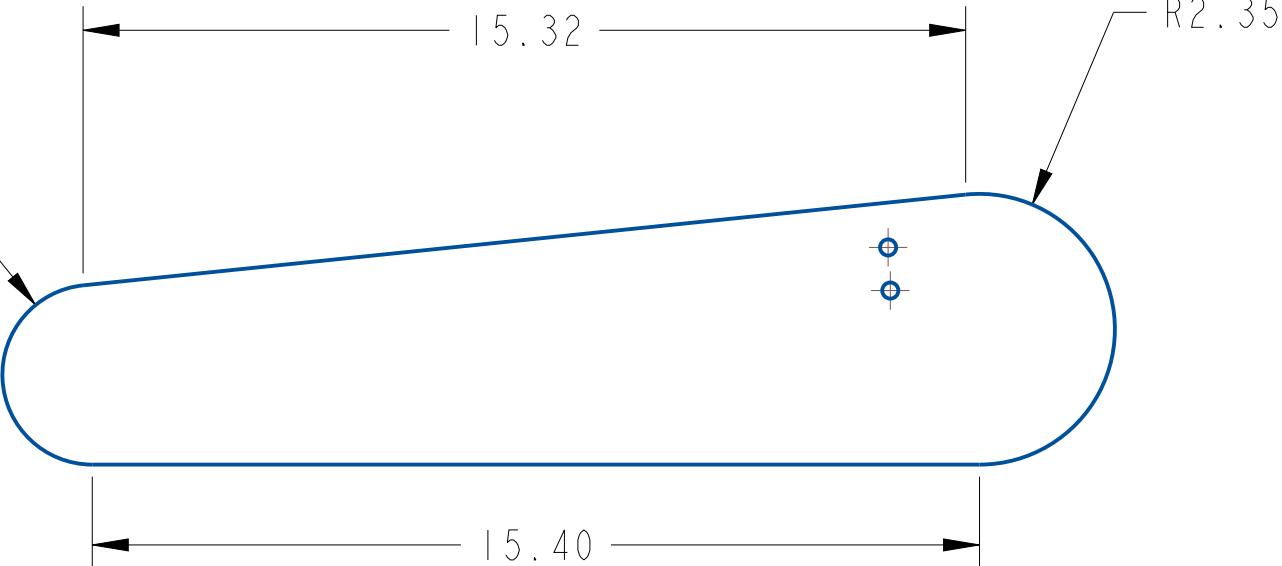
TITLE:

SIDE_PLATE_FEATURES

DWG. NO.
DRW0003

REV
002

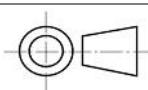
SCALE: 0.071 DO NOT SCALE SHEET 9 OF 10



SCALE 0.300



 <p>FLORIDA INSTITUTE OF TECHNOLOGY ESTABLISHED 1958</p>		NAME	DATE	TEAM NAME: &team_name
	DRAWN	AS	Jan-20-20	TITLE: SIDE_PLATE_FEATURES
	CHECKED			
	APPROVED			
MATERIAL AL 6061	FINISHED PART			A
FINISH NONE				
COMMENTS:			DWG. NO.	REV
			DRW0003	002
			SCALE: 0.071	DO NOT SCALE
			SHEET 10 OF 10	



PROPRIETARY AND CONFIDENTIAL

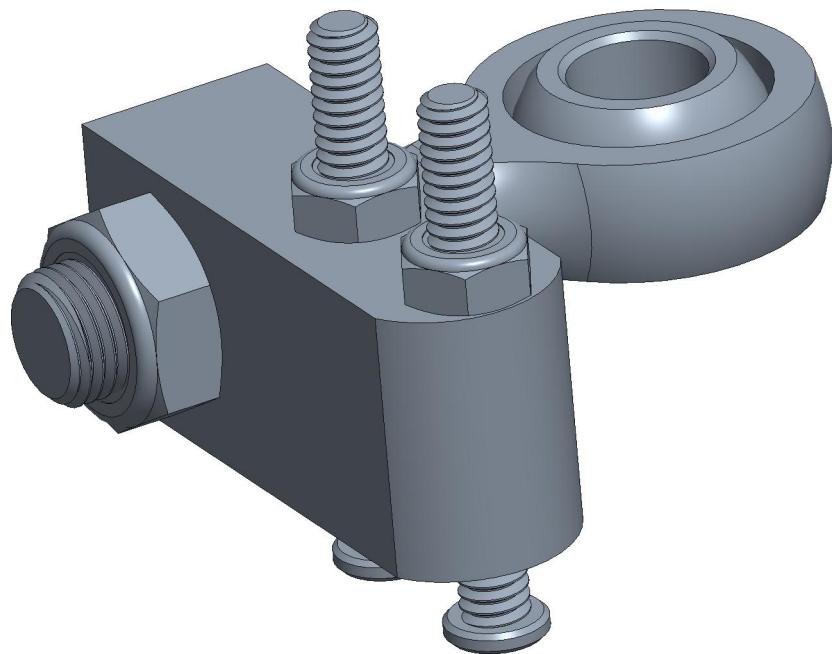
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIT. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIT IS PROHIBITED

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

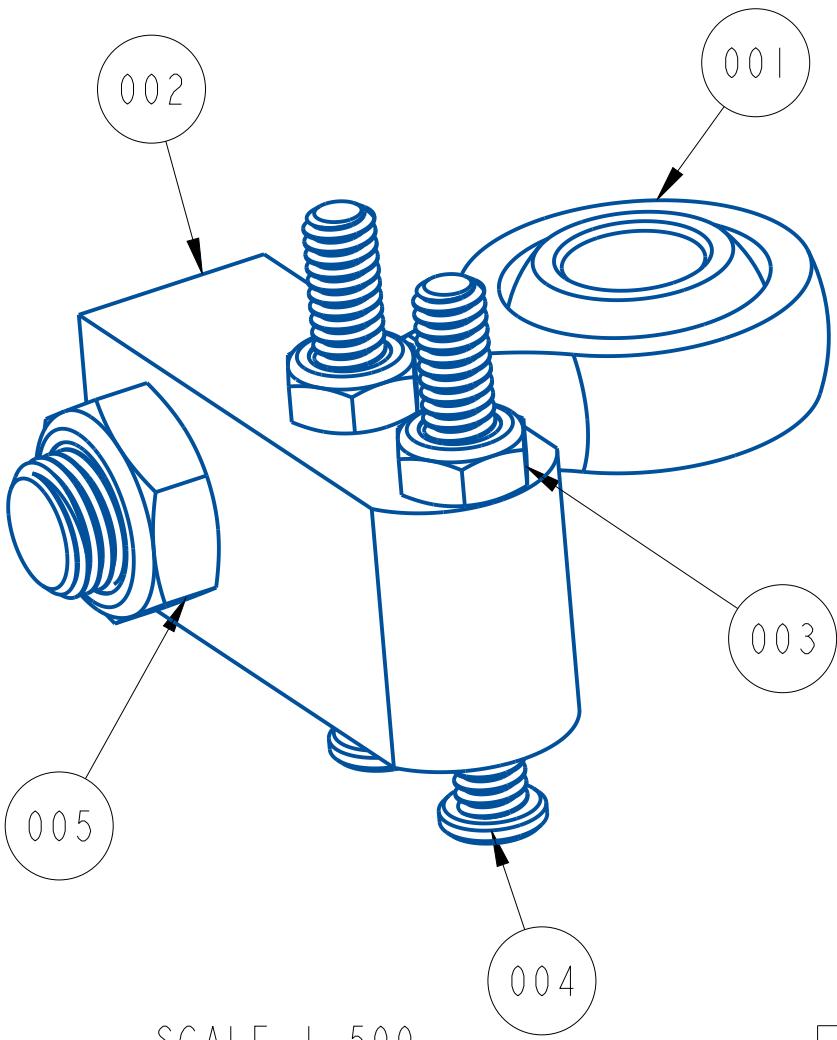
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



SCALE 1.500

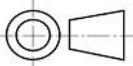
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIT. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIT IS PROHIBITED				NAME	DATE	TEAM NAME:
			DRAWN	AS	Jan-20-20	NASA RMC
<u>UNLESS OTHERWISE SPECIFIED:</u> DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 [0.81]		MATERIAL AS	FINISHED PART	TITLE: TENSION ASSEMBLY		
TWO PLACE DECIMAL ± 0.030 [0.4] THREE PLACE DECIMAL ± 0.005 [0.2] ANGULAR $\pm 2^\circ$ ALL FINISHES 125 OR BETTER		FINISH		DWG. NO.	REV	A
				X - 1700	002	
				SCALE: 0.500	DO NOT SCALE	SHEET 1 OF 3



SCALE 1.500

PROPRIETARY AND CONFIDENTIAL

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UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

ITEM #	DESCRIPTION	QTY
001	Ball Joint Rod end	2
002	Support Block	2
003	High-Strength Steel Thin Nylon-Insert Locknut Grade 8, Zinc Yellow-Chromate Plated, 1/4"-20 Thread Size	4
004	Ultra-Low-Profile Socket Head Screw Alloy Steel, 1/4"-20 Thread Size, 2" Long	4
005	High-Strength Steel Thin Nylon-Insert Locknut Grade 8, Zinc-Plated, 1/2"-20 Thread Size	2



MATERIAL NONE

FINISH NONE

COMMENTS: LHS AND RHS ASSEMBLIES ARE THE SAME.

DRAWN AS Jan-20-20

CHECKED

APPROVED

TEAM NAME:
NASA RMC

TITLE:

TENSION ASSEMBLY

DWG. NO.

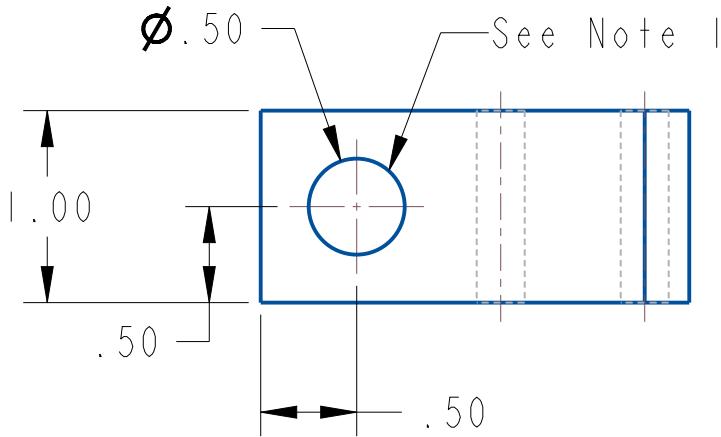
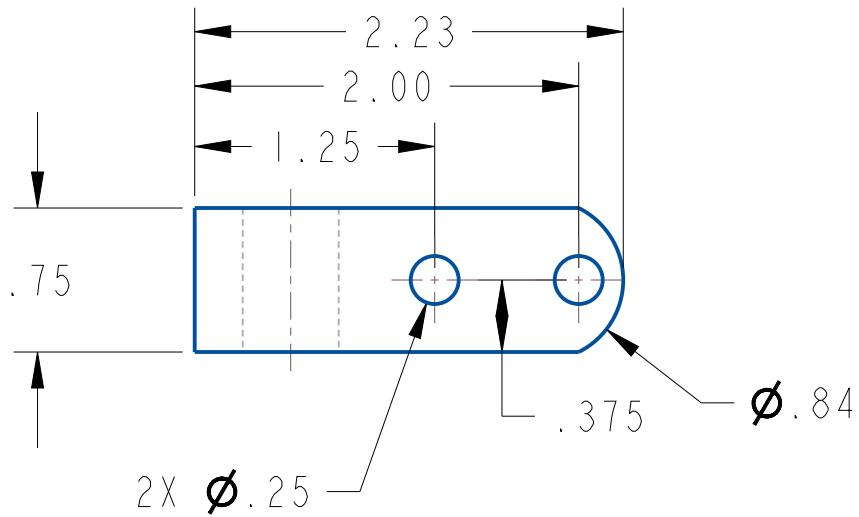
X - 1700

REV

002

SCALE: 0.500 DO NOT SCALE

SHEET 2 OF 3



NOTE 1

Fully threaded hole: 1/2"-20
to match Ball Joint Rod End

PROPRIETARY AND CONFIDENTIAL
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DRAWING IS THE SOLE PROPERTY OF
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AS A WHOLE WITHOUT THE WRITTEN
PERMISSION OF FIT IS PROHIBITED

UNLESS OTHERWISE SPECIFIED:

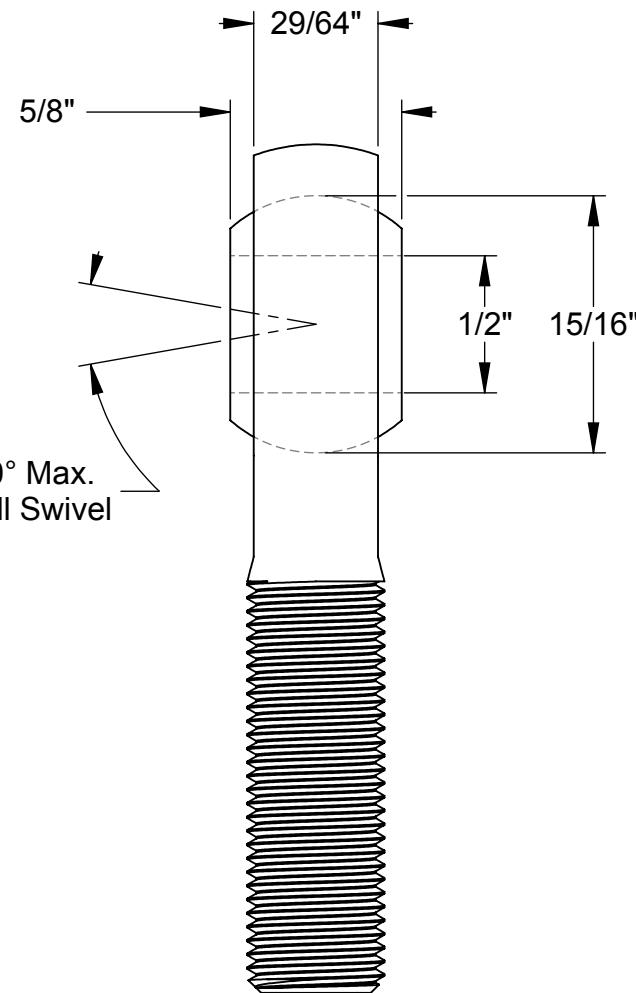
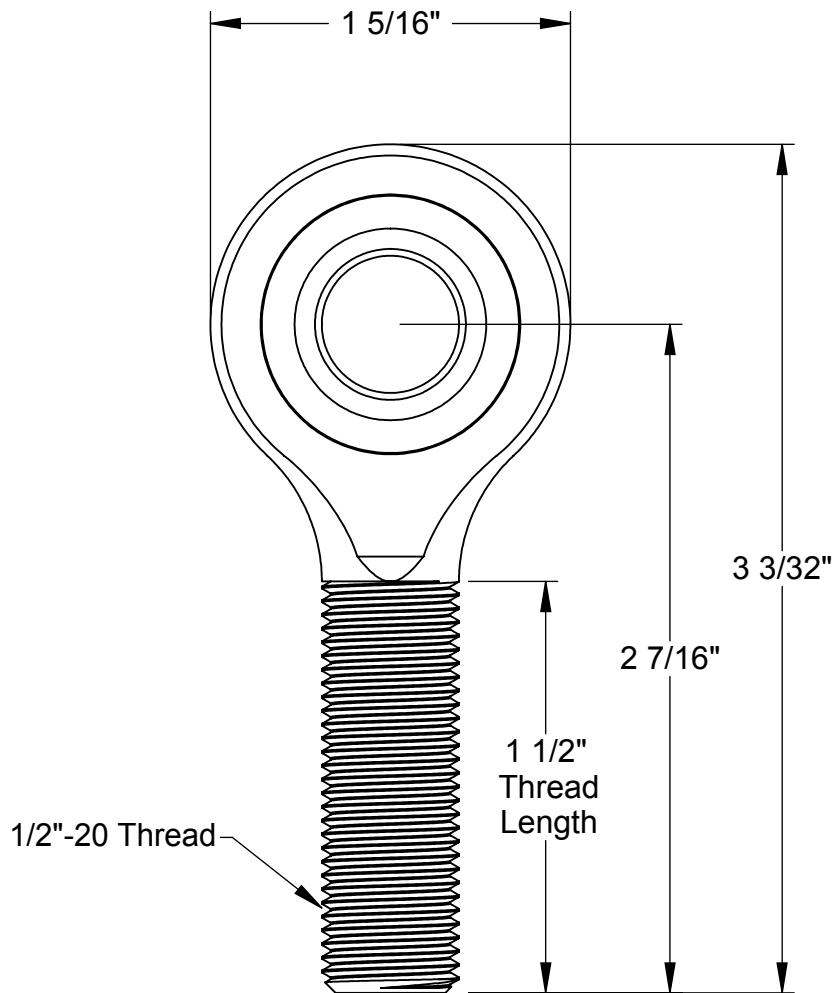
DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



MATERIAL AL 6061	NAME AS	DATE Jan-20-20	TEAM NAME: NASA RMC
FINISH NONE	CHECKED		
	APPROVED		
COMMENTS: 1/2" Hole to be threaded to match Ball joint rod end.			
DWG. NO. X - 1700 - 002			REV 002
SCALE: 1.000 DO NOT SCALE		SHEET 3 OF 3	



X-1700-001

Notes:

Zinc-Plated Steel Housing
Chrome-Plated Steel Ball

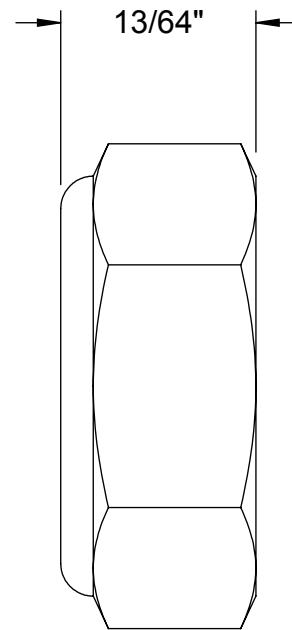
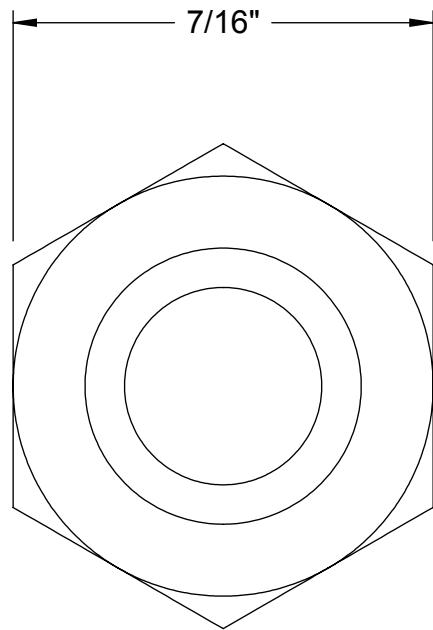
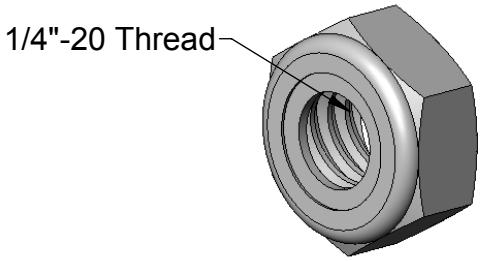
McMASTER-CARR CAD

<http://www.mcmaster.com>
© 2013 McMaster-Carr Supply Company
Information in this drawing is provided for reference only.

PART
NUMBER

60645K161

Right-Hand Thread
Ball Joint Rod End



X-1700-003

McMASTER-CARR CAD

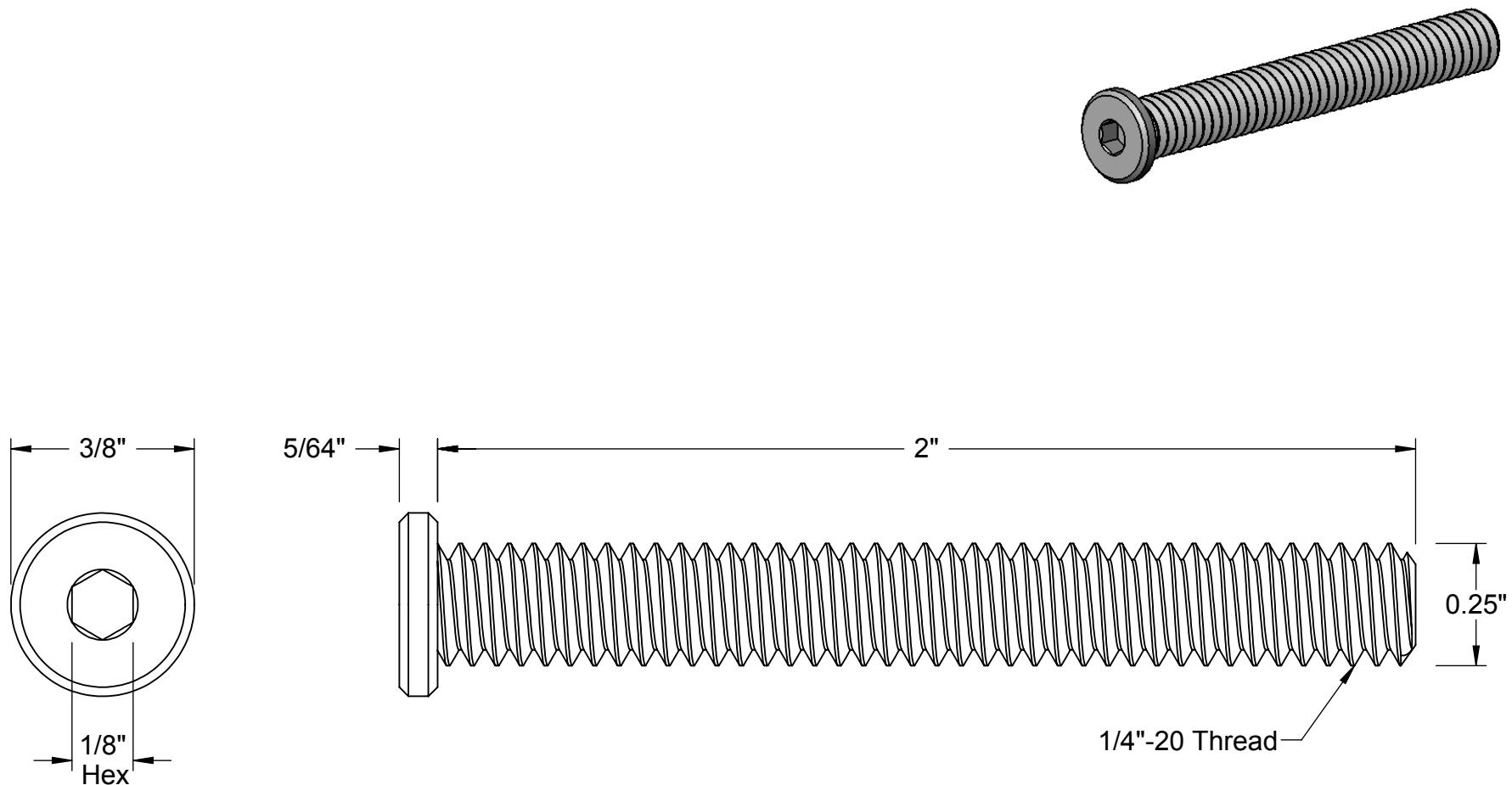
<http://www.mcmaster.com>

© 2015 McMaster-Carr Supply Company

Information in this drawing is provided for reference only.

PART NUMBER **94945A205**

Thin Nylon-Insert
Locknut



X-1700-004

McMASTER-CARR CAD

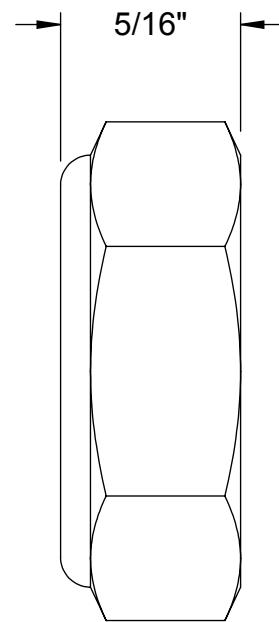
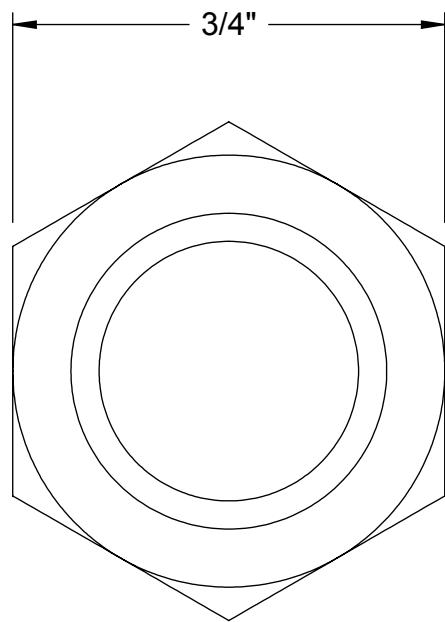
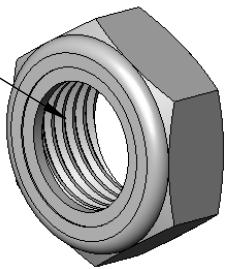
<http://www.mcmaster.com>

© 2019 McMaster-Carr Supply Company

Information in this drawing is provided for reference only.

PART NUMBER **90357A021**

Alloy Steel Ultra-Low-Profile
Socket Head Screw



X-1700-005

McMASTER-CARR CAD

<http://www.mcmaster.com>

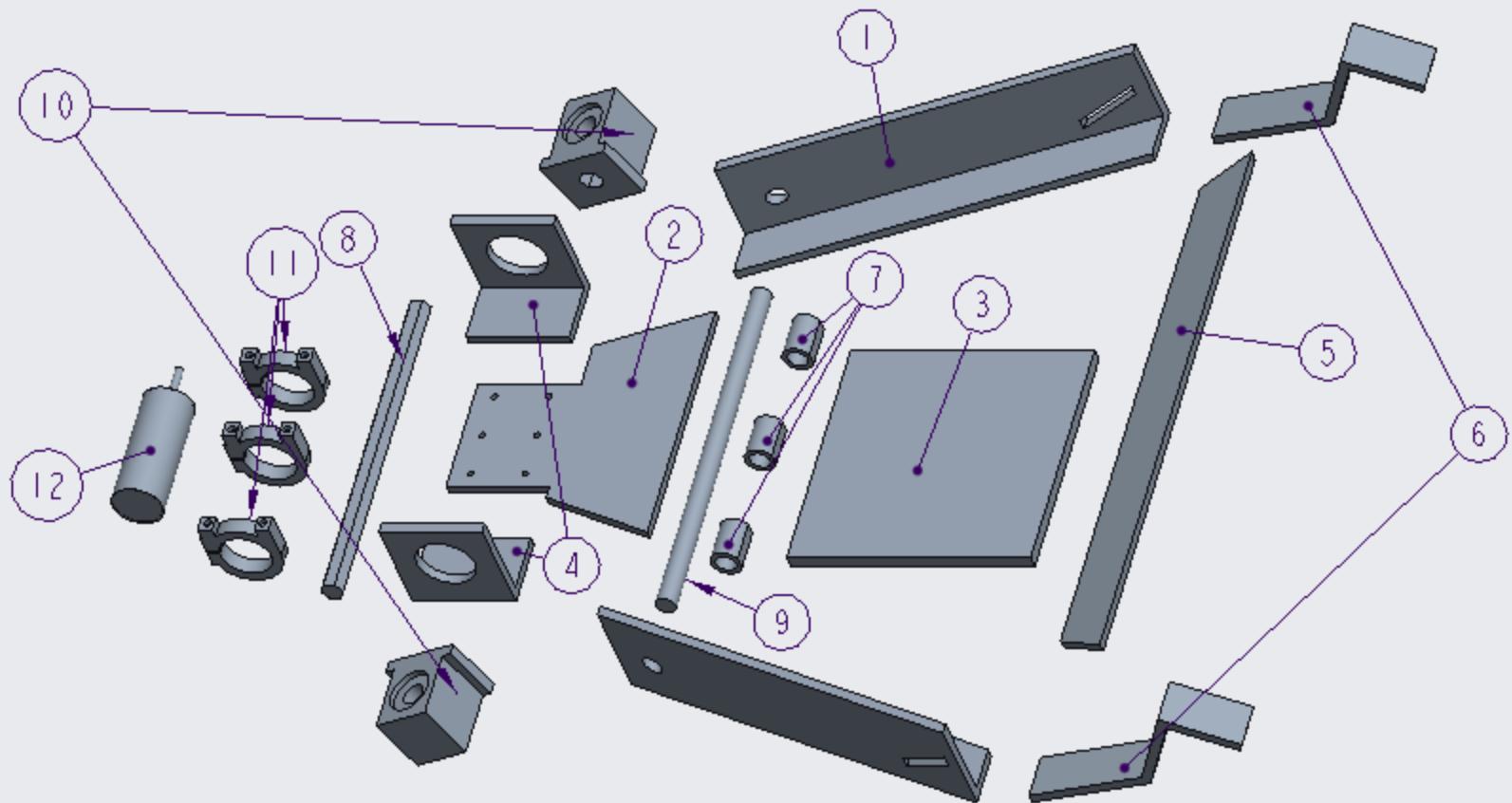
© 2015 McMaster-Carr Supply Company

Information in this drawing is provided for reference only.

PART
NUMBER

94945A225

Thin Nylon-Insert
Locknut



SCALE

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR () ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 (0.81)

TWO PLACE DECIMAL ± 0.030 (0.4)
THREE PLACE DECIMAL ± 0.005 (0.2)
ANGULAR $\pm ^\circ$
ALL FINISHES 125 OR BETTER



0.350

COMMENTS:

DRAWN BY

HB

CHECKED

APPROVED

REMOVED

FINISHED PART

REMOVED

NAME

JAN-23-20

DATE

TEAM NAME:

NASA RMC

TITLE:

Delivery Tray

DRG. NO.

D-1000

REV

003

SCALE

0.111

SHEET 1 OF 1

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Number	Part Name	Part Number	Quantity
1	Left Hand Bracket	D-1130	2
2	Base Plate	D-1140	1
3	Bridge Plate	D-1210	1
4	Base Bracket	D-1110	2
5	Bent Plate	D-1160	1
6	Hook Arm	D-1180	2
7	Mounting Cylinders	D-1220	3
8	Hex Shaft	D-1240	1
9	Bridge Shaft	D-1230	1
10	Lead Screw Blocks	D-6000	2
11	Motor Mount	-	3
12	Motor	-	1



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

MATERIAL Aluminum

FINISH -

COMMENTS:

NAME

DRAWN

CHECKED

APPROVED

DATE

CA

TEAM NAME:
NASA RMC

TITLE:

Parts Table

DWG. NO.

DRW0002

REV

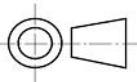
001

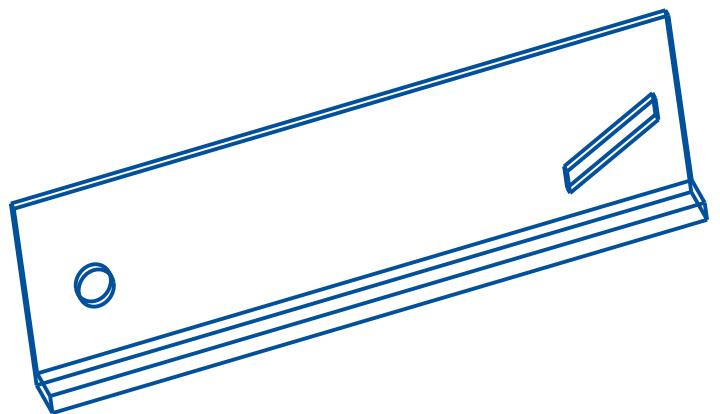
SCALE: DRAWING SCALE

SHEET 1 OF 1

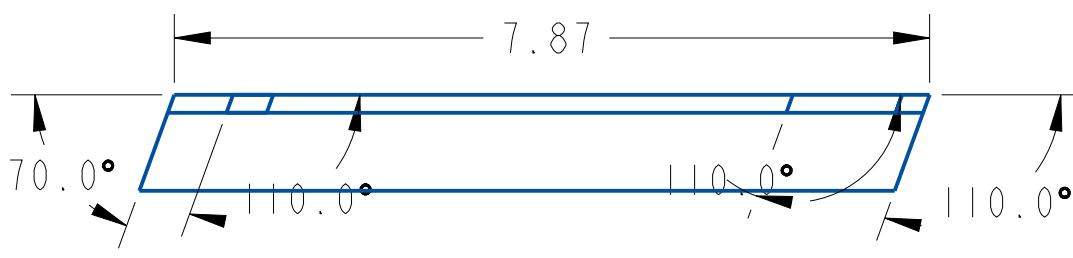
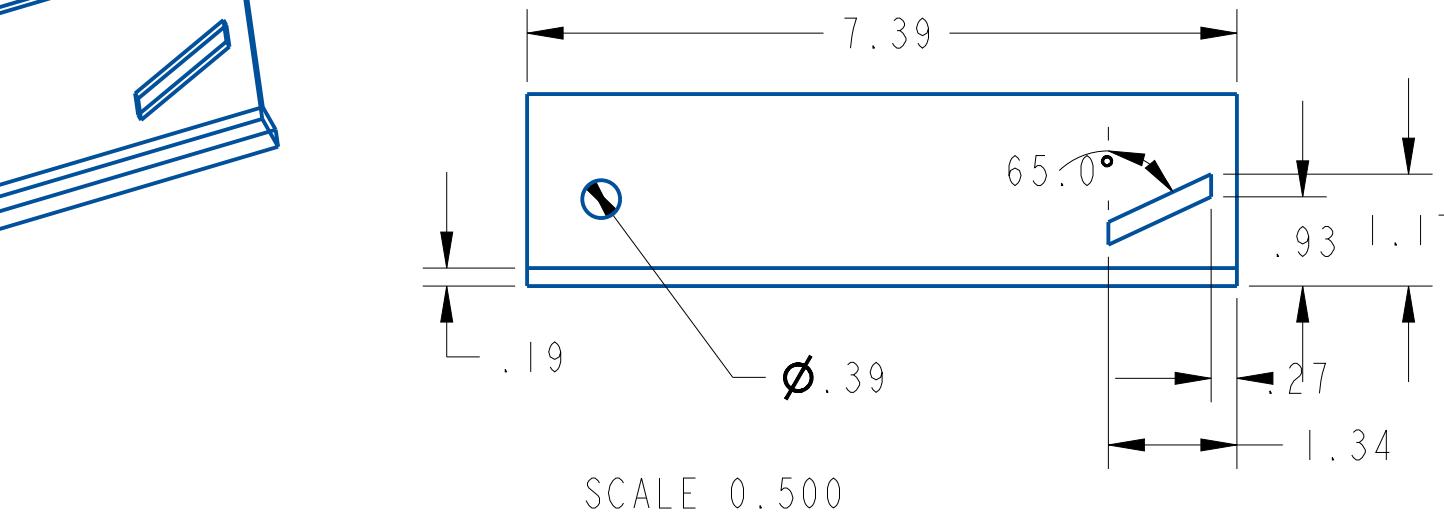
PROPRIETARY AND CONFIDENTIAL

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SCALE 0.500



SCALE 0.500

Note: Right hand bracket
is identical only mirrored

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 (.81)

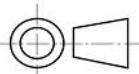
TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^{\circ}$
ALL FINISHES 125 OR BETTER

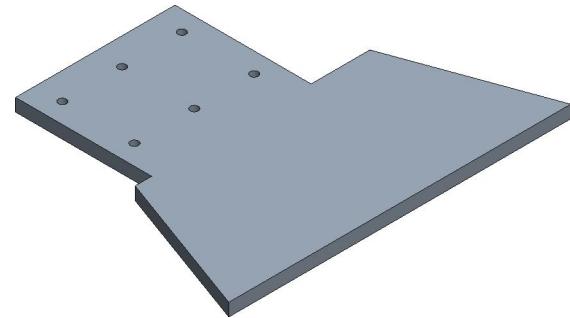
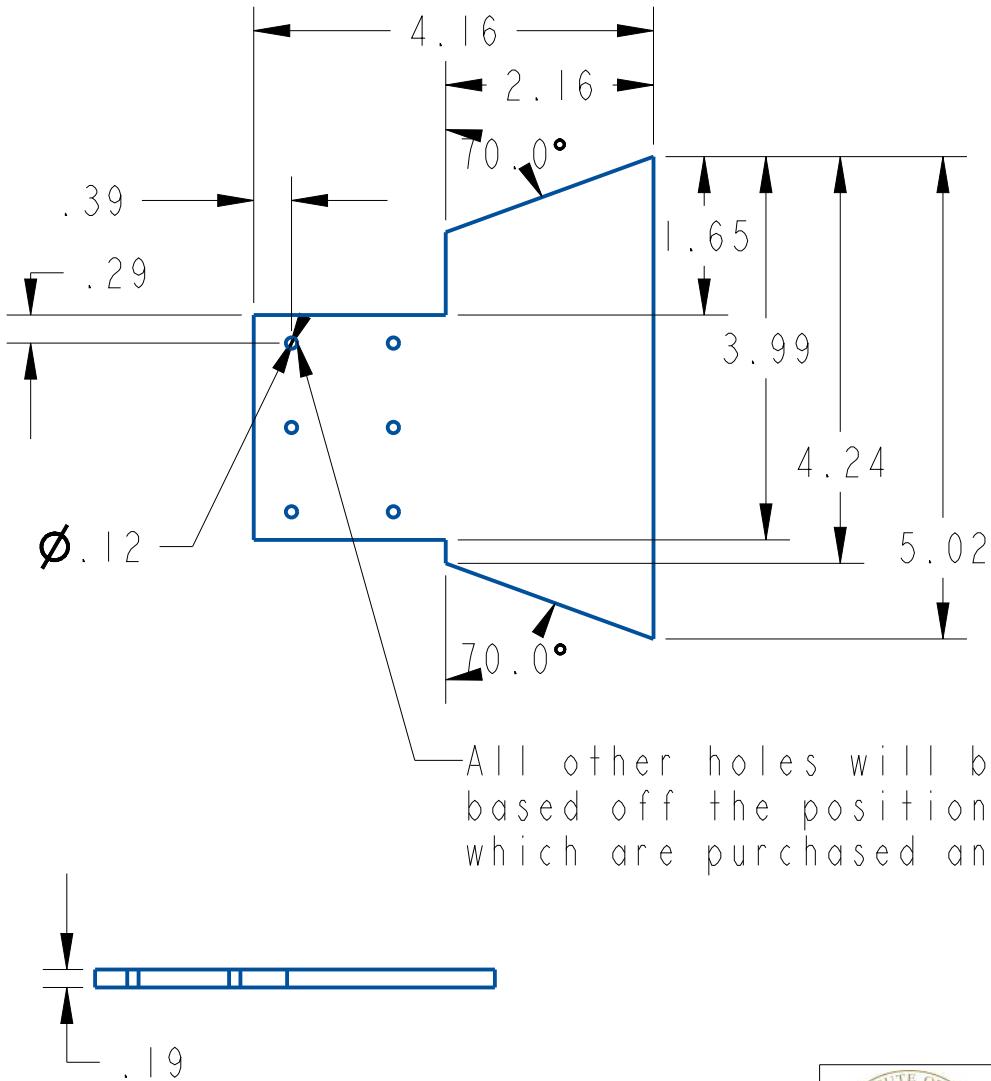


DRAWN	CA	DATE	TEAM NAME: NASA RMC
CHECKED			
APPROVED			
TITLE: Left Hand Bracket			
MATERIAL Aluminum	FINISHED PART	DWG. NO.	REV
FINISH -		D-1130	001
COMMENTS:			SCALE: 0.167
			SHEET 1 OF 1

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All other holes will be match drilled based off the position of the motor mounts, which are purchased and attached to the motor.

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DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



MATERIAL Aluminum

FINISH NONE

COMMENTS:

NAME: NB
DATE: Jan-22-20

CHECKED

APPROVED

TEAM NAME:
NASA RMC

TITLE:

Base Plate

DWG. NO.

D-1140

REV

002

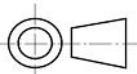
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DO NOT SCALE

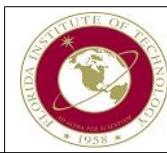
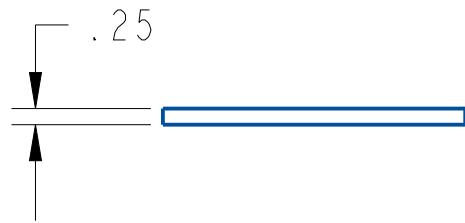
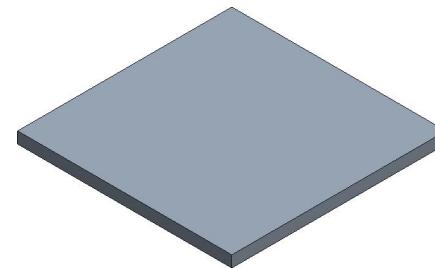
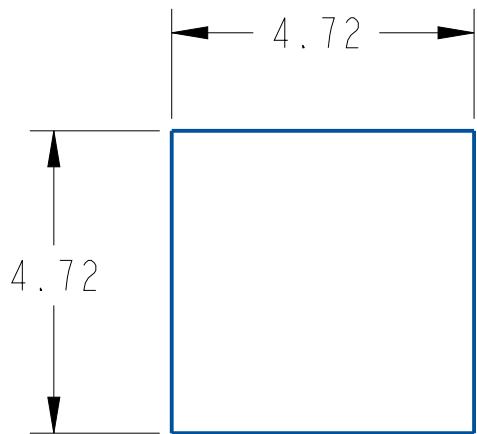
SHEET 1 OF 1

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D
C
B
A



MATERIAL

Aluminum

FINISH

NONE

NAME

NB

DATE

Jan-22-20

TEAM NAME:

NASA RMC

TITLE:

Bridge Plate

DWG. NO.

D-1140

REV

002

SCALE: 1.000

DO NOT SCALE

SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED:

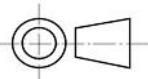
DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

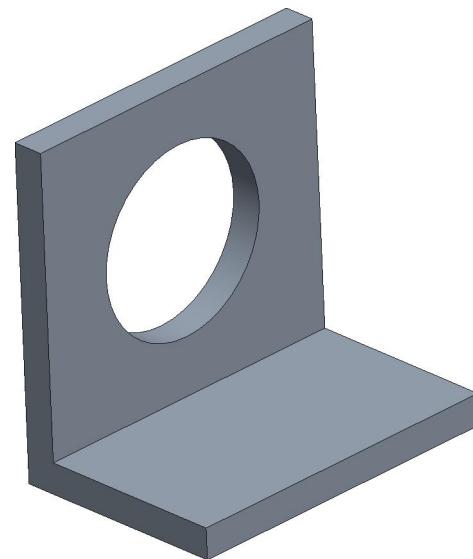
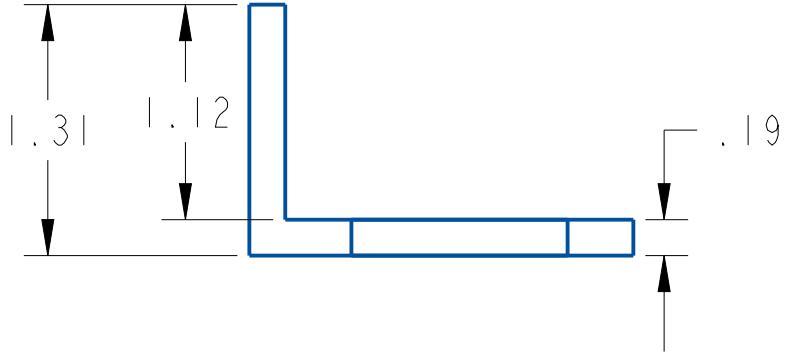
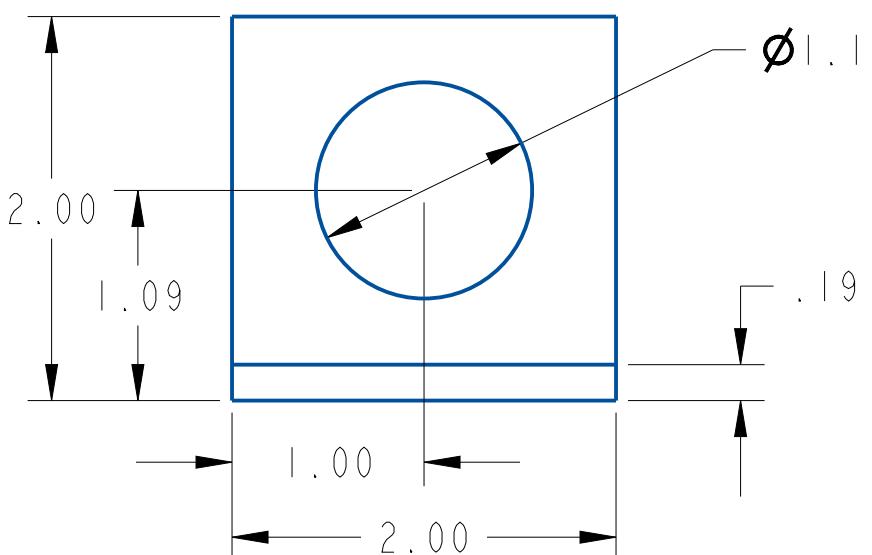
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

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Note: Bracket will be cut to length from extruded stock and hole will be drilled. Other dimensions will be determined by the supplier.



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

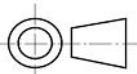
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

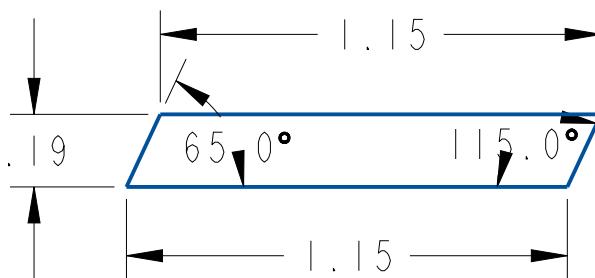
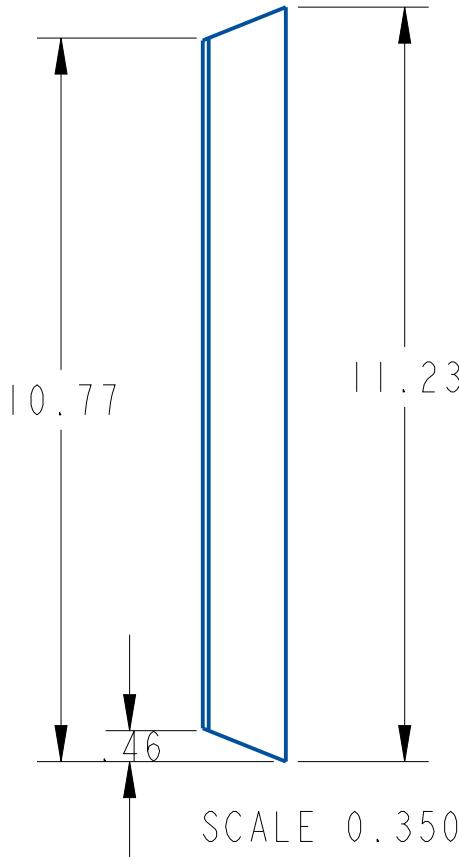
MATERIAL	Aluminum	NAME		DATE	TEAM NAME:
DRAWN	NB			Jan-22-20	NASA RMC
CHECKED					TITLE:
APPROVED					Base Bracket
COMMENTS:					DWG. NO. REV
					D-1110-001 001
SCALE: 1.000					SHEET 1 OF 2

PROPRIETARY AND CONFIDENTIAL

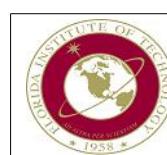
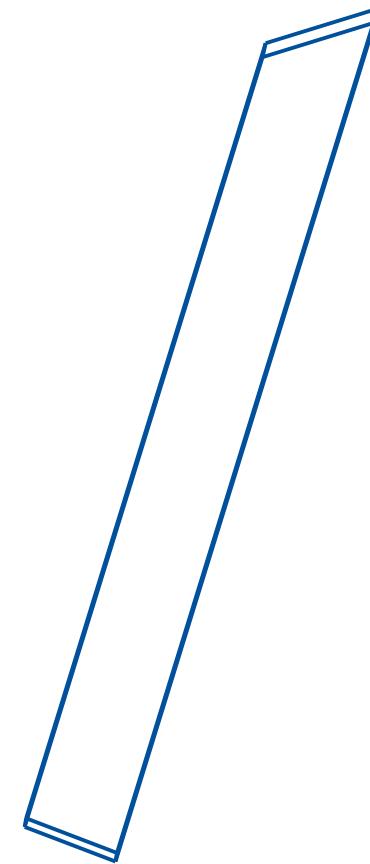
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D
C
B
A



SCALE 2.000



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

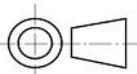
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

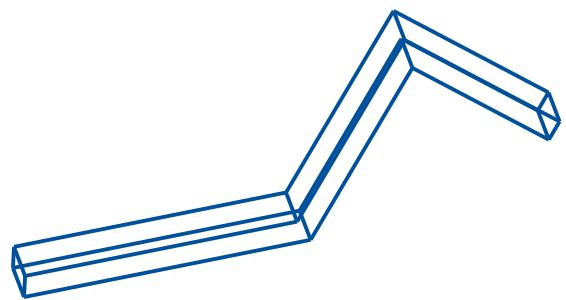
TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^{\circ}$
ALL FINISHES 125 OR BETTER

		NAME	DATE	TEAM NAME: NASA RMC
DRAWN	NB	Jan-23-20		
CHECKED				
APPROVED				
MATERIAL Aluminum		FINISHED PART		
FINISH NONE				
COMMENTS:				DWG. NO.
				REV
D - 1160				004
SCALE: 0.250				SHEET 1 OF 1

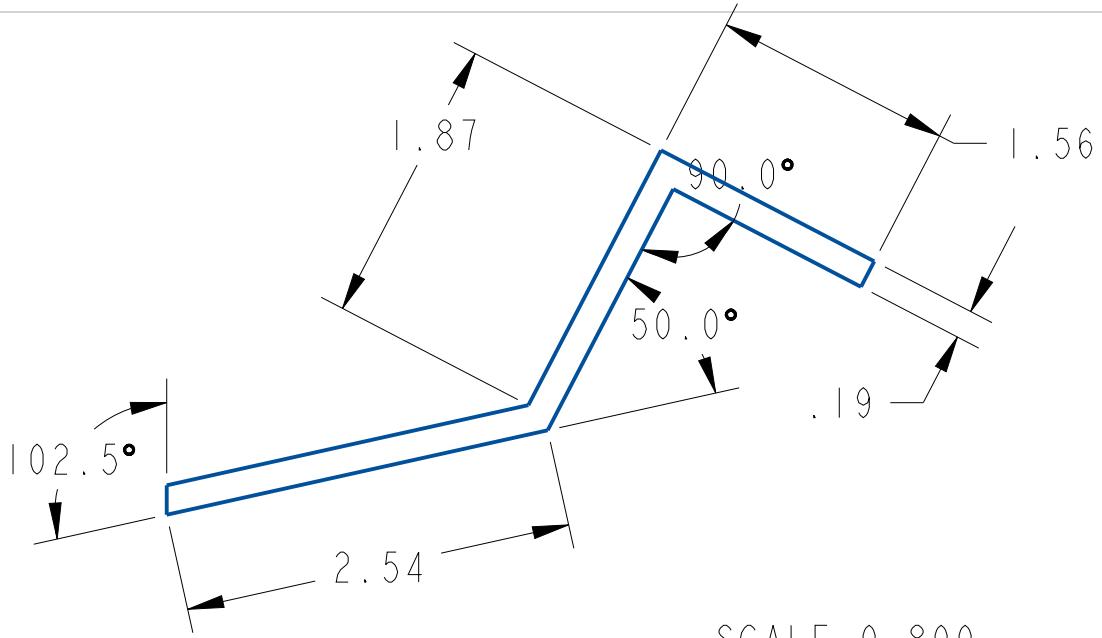
PROPRIETARY AND CONFIDENTIAL

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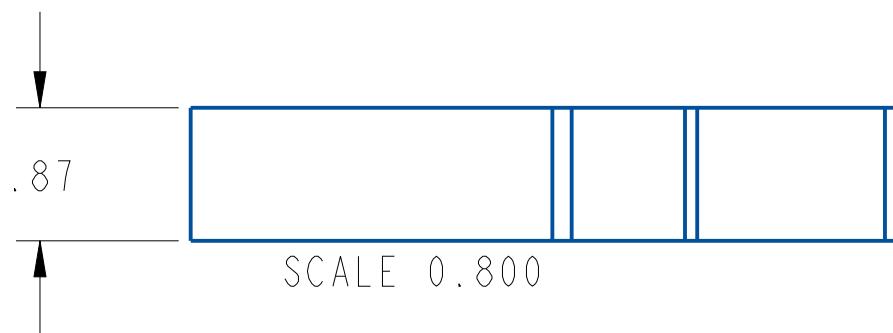




SCALE 0.600



SCALE 0.800

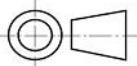


.87

SCALE 0.800

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REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER



MATERIAL Aluminum

FINISH -

COMMENTS:

NAME

DATE

TEAM NAME:
NASA RMC

DRAWN

Jan-22-20

CHECKED

APPROVED

TITLE:

Hook Arm

DWG. NO.

D-1180

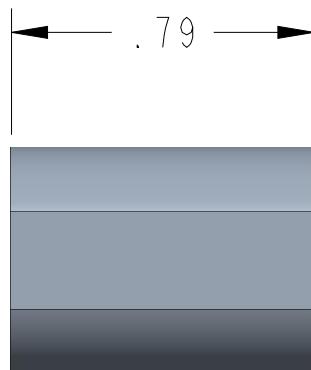
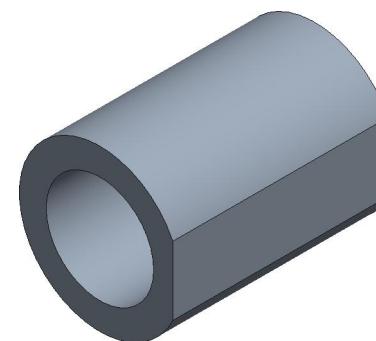
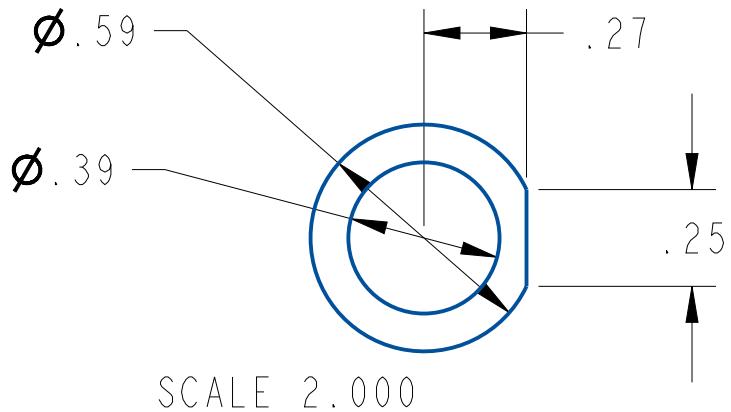
REV

001

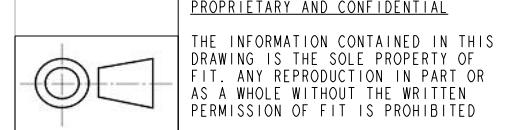
SCALE: 0.500

SHEET 1 OF 1

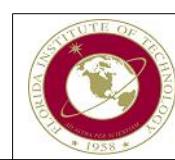
D
C
B
A



SCALE 2.000



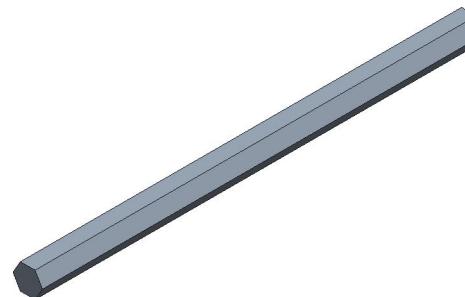
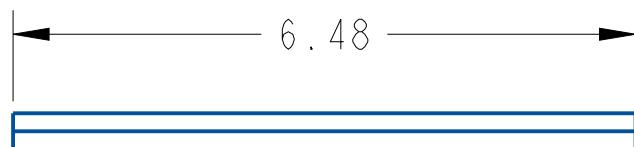
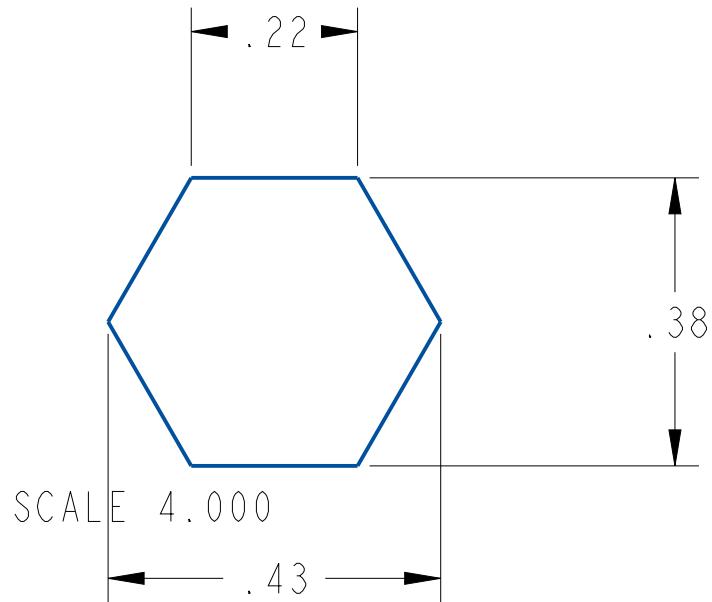
UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS
REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 [0.81]
TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^{\circ}$
ALL FINISHES 125 OR BETTER



MATERIAL Aluminum
FINISH NONE

COMMENTS:

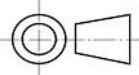
	NAME	DATE	TEAM NAME: NASA RMC
DRAWN	NB	Jan-22-20	
CHECKED			
APPROVED			
MATERIAL Aluminum	FINISHED PART		
REV			
DWG. NO.	D-1220	001	
SCALE: 1.000	DO NOT SCALE	SHEET 1 OF 1	

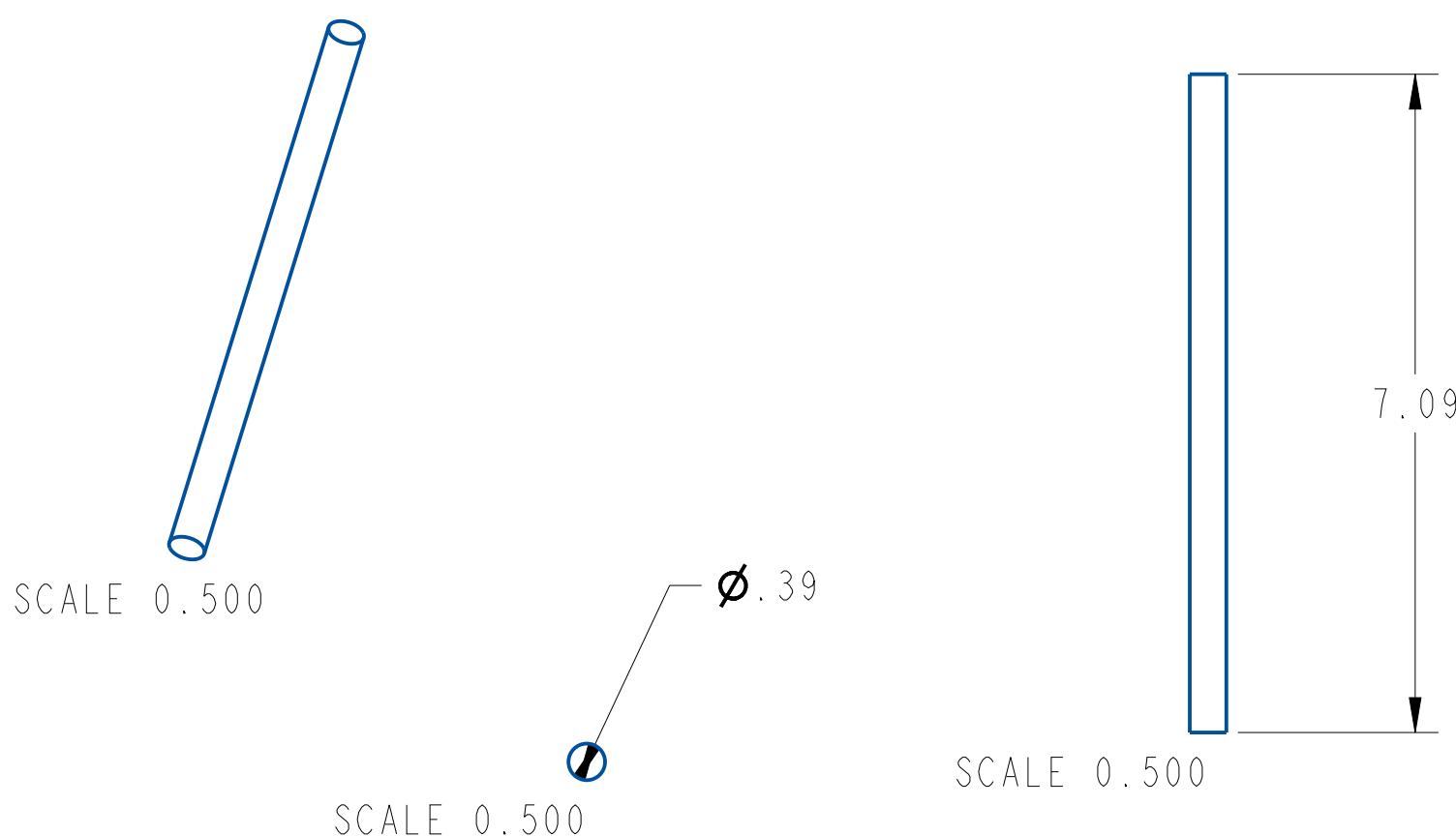


<u>UNLESS OTHERWISE SPECIFIED:</u>		NAME	DATE	TEAM NAME:
DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS		NB	Jan-22-20	NASA RMC
REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 [0.81]		CHECKED		TITLE:
REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 [0.81]		APPROVED		Hex Shaft
MATERIAL Aluminum	FINISHED PART			
FINISH NONE				
COMMENTS:	DWG. NO.		REV	
	D - 1240		00	
	SCALE: 1.000	DO NOT SCALE		SHEET 1 OF 1

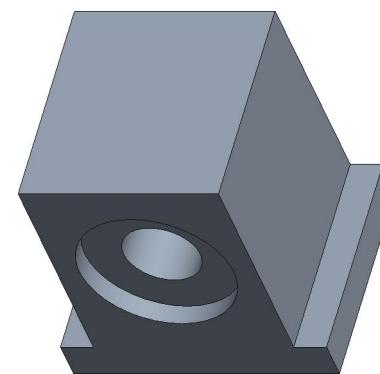
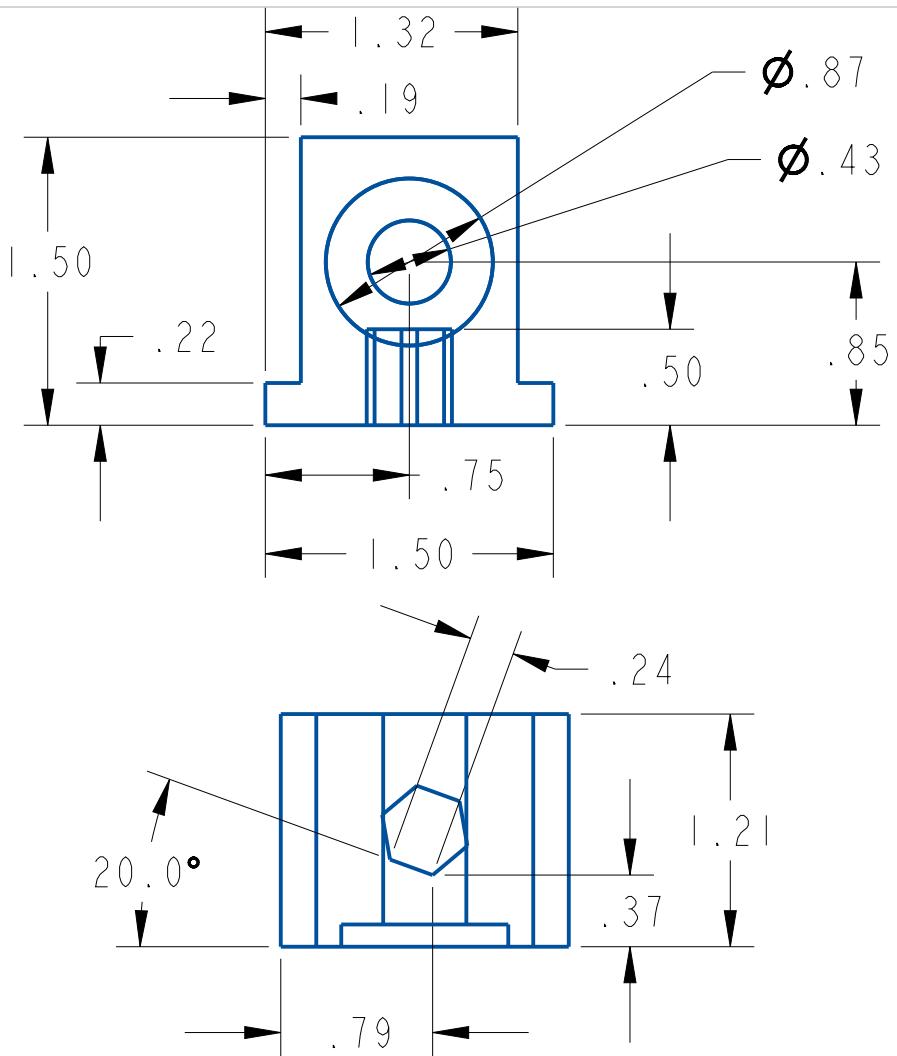
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PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIT. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIT IS PROHIBITED			NAME	DATE	TEAM NAME:
			CA	Jan-22-20	NASA RMC
<u>UNLESS OTHERWISE SPECIFIED:</u> DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 [0.81] TWO PLACE DECIMAL ± 0.030 [0.4] THREE PLACE DECIMAL ± 0.005 [0.2] ANGULAR $\pm 2^{\circ}$ ALL FINISHES 125 OR BETTER		MATERIAL	FINISHED PART	TITLE: Bridge Shaft	
		Aluminum		DWG. NO.	REV
		FINISH -		D-1230	001
		COMMENTS:		SCALE: 0.333	SHEET 1 OF 1



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UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ±0.030 [0.4]
THREE PLACE DECIMAL ±0.005 [0.2]
ANGULAR ± 2°
ALL FINISHES 125 OR BETTER



MATERIAL Aluminum

FINISH NONE

COMMENTS:

NAME

DRAWN

CHECKED

APPROVED

DATE

Jan-23-20

TEAM NAME:
NASA RMC

TITLE:

Tray Lead Screw Block

DWG. NO.

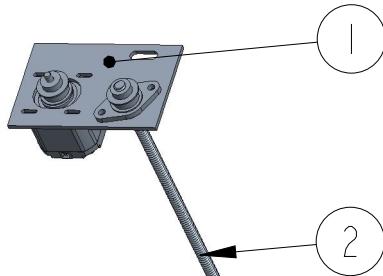
D - 6000

REV

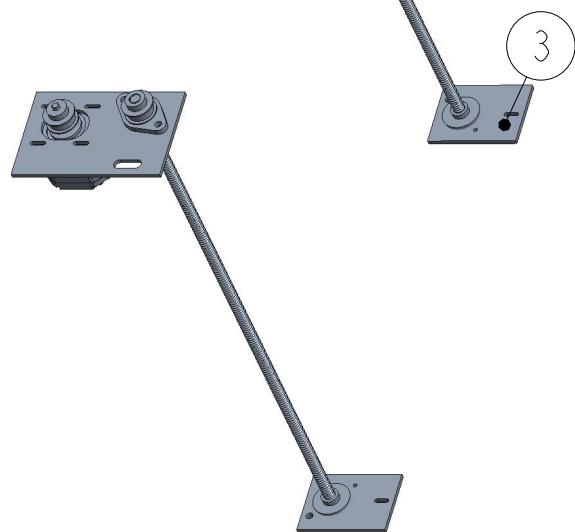
001

SCALE: 1.000

SHEET 1 OF 1



ITEM#	DESCRIPTION	QTY.
1	TOP MOUNTING ASSEMBLY	2
2	LEAD SCREW	2
3	BOTTOM MOUNTING ASSEMBLY	2



SCALE 0.200

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

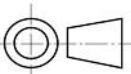
TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

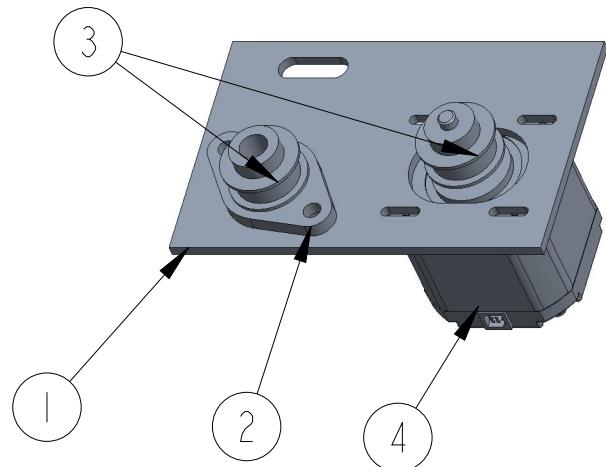


MATERIAL 6061 AL	NAME LM	DATE Mar-10-20	TEAM NAME: NASA RMC
FINISH NONE	CHECKED		TITLE: LeadScrew Assembly
	APPROVED		
COMMENTS:			DWG. NO. ECE-1500
			REV 01
SCALE: 0.500 DO NOT SCALE			SHEET 1 OF 6

PROPRIETARY AND CONFIDENTIAL

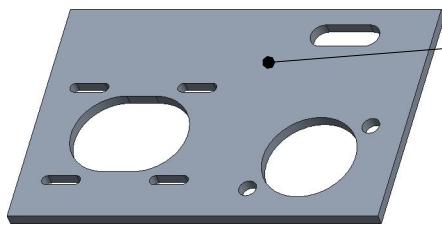
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIT. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIT IS PROHIBITED



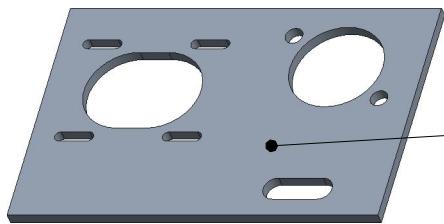


ITEM#	DESCRIPTION	QTY.
1	Plate	2
2	Bearing	2
3	Pulley	4
4	Motor	2

PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FIT. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF FIT IS PROHIBITED		<p>FLORIDA INSTITUTE OF TECHNOLOGY ESTABLISHED 1958</p>	DRAWN	NAME	DATE	TEAM NAME: NASA RMC
			CHECKED			TITLE: TOP MOUNTING ASSEMBLY
<u>UNLESS OTHERWISE SPECIFIED:</u> DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS REMOVE ALL BURRS AND SHARP EDGES MAX ALLOWED 0.032 [0.8] TWO PLACE DECIMAL ± 0.030 [0.4] THREE PLACE DECIMAL ± 0.005 [0.2] ANGULAR $\pm 2^{\circ}$ ALL FINISHES 125 OR BETTER		MATERIAL 6061 AL	FINISHED PART			
		COMMENTS:			DWG. NO.	REV
					ECE-1510	01
					SCALE: 0.500	DO NOT SCALE
					SHEET 2 OF 6	



Left Plate



Right Plate



MATERIAL 6061 AL

FINISH NONE

COMMENTS:

NAME

DATE

Mar-10-20

TEAM NAME:
&team_name

TITLE:

Plate

DWG. NO.

ECE - 1511

REV

01

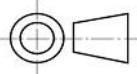
SCALE: 0.077

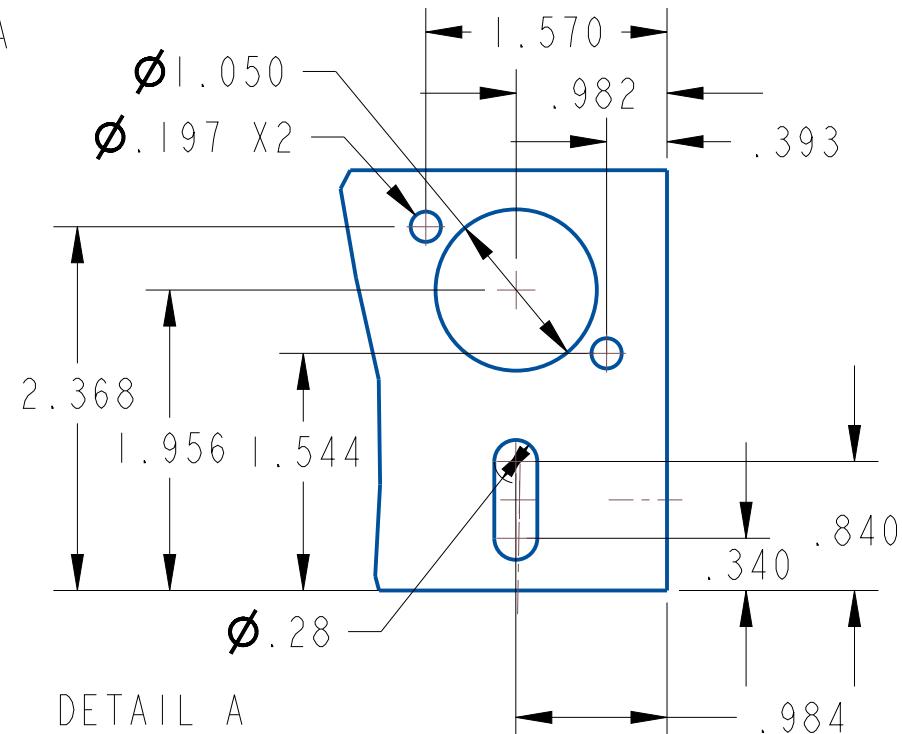
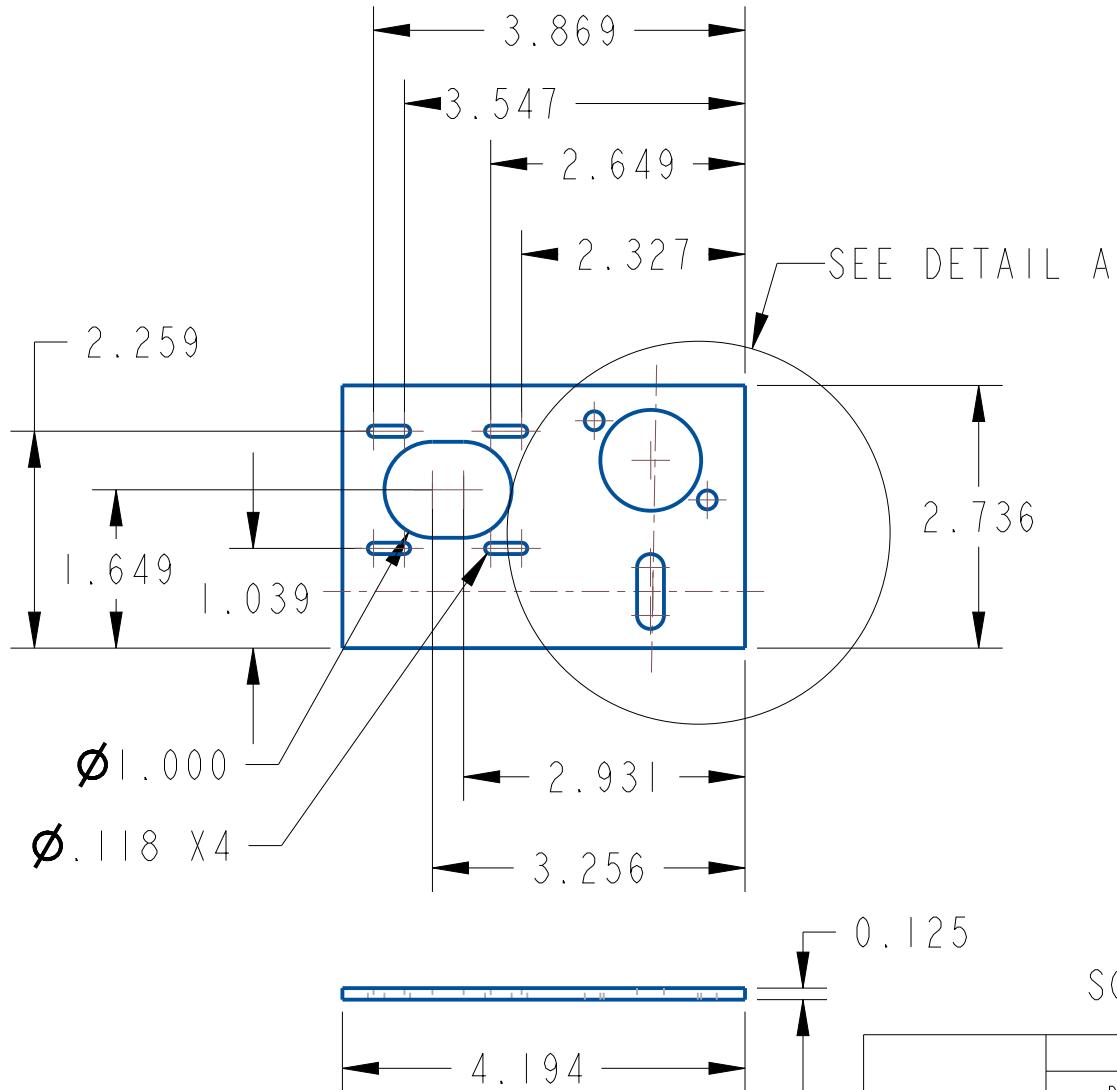
DO NOT SCALE

SHEET 3 OF 6

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DETAIL A
SCALE 0.800

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

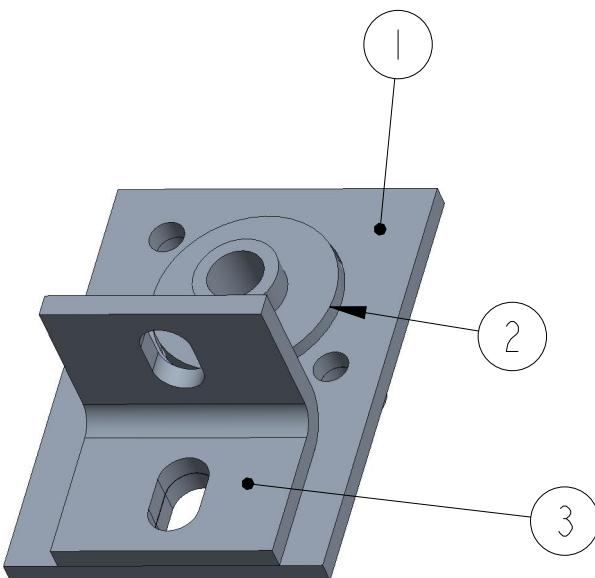
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

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FIT. ANY REPRODUCTION IN PART OR
AS A WHOLE WITHOUT THE WRITTEN
PERMISSION OF FIT IS PROHIBITED

		NAME	DATE	TEAM NAME:
	DRAWN	LM	Mar-10-20	NASA RMC
	CHECKED			
	APPROVED			
MATERIAL 6061 AL	FINISHED PART			TITLE:
FINISH NONE				Top Plate
COMMENTS:	DWG. NO.	REV		
	ECE-1511	01		
SCALE: 0.500	DO NOT SCALE	SHEET 4 OF 6		



SCALE 1,000

ITEM#	DESCRIPTION	QTY.
1	Lower_Mounting_Plate	4
2	Bearing	4
2	Bracket	4



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

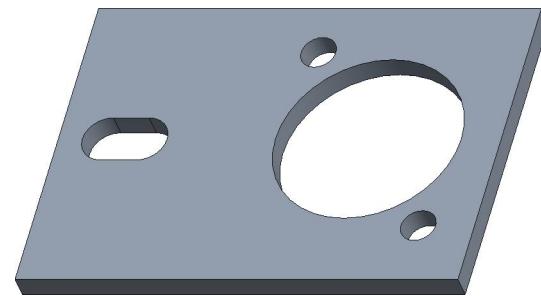
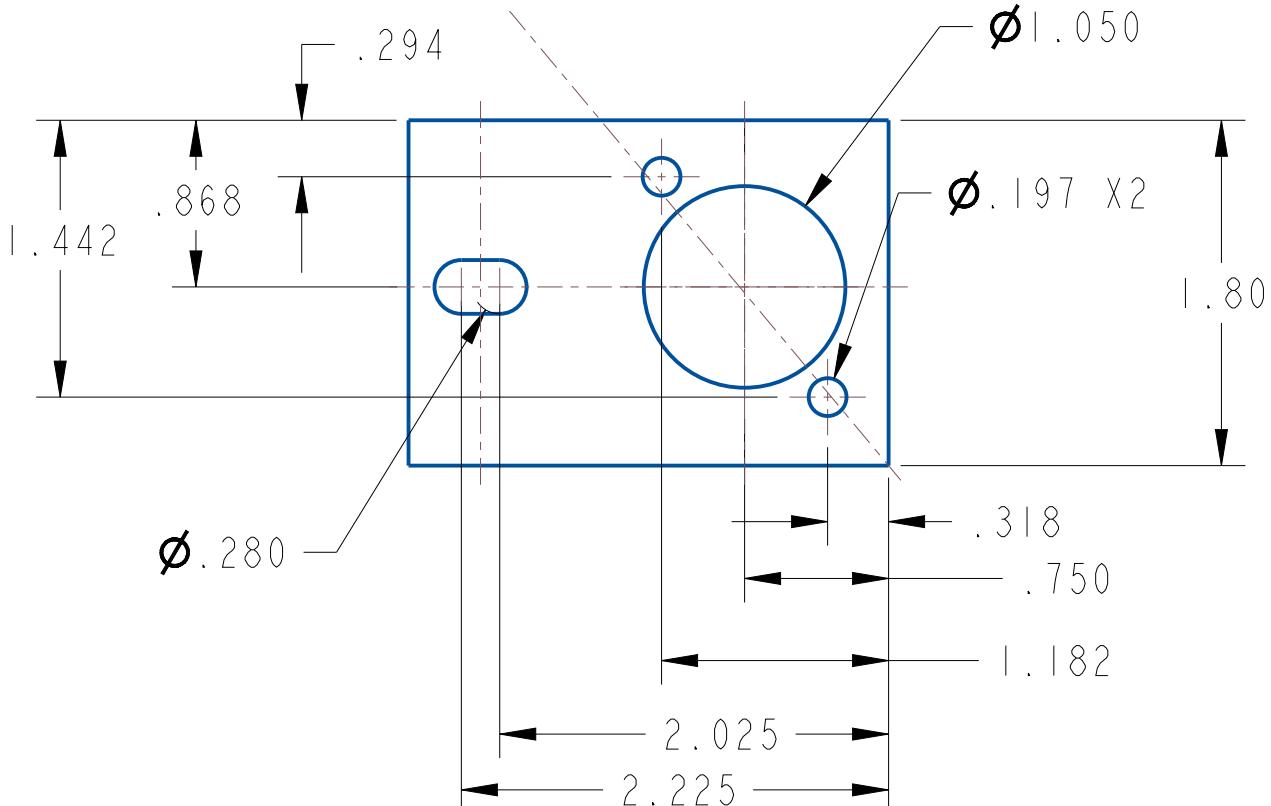
REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

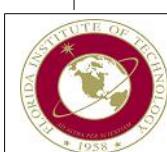
PROPRIETARY AND CONFIDENTIAL

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 <p>FLORIDA INSTITUTE OF TECHNOLOGY ESTABLISHED 1958</p>		NAME	DATE	TEAM NAME:
	DRAWN	LM	Mar-11-20	NASA RMC
	CHECKED			TITLE:
	APPROVED			Lower Mount
MATERIAL 6061 AL	FINISHED PART		DWG. NO.	REV
FINISH NONE			ECE-1530	01
COMMENTS:			SCALE: 1.000	DO NOT SCALE
			SHEET 1 OF 2	



Note: QTY. = 4



MATERIAL 6061 AL

FINISH NONE

COMMENTS:

NAME

DATE

TEAM NAME:
NASA RMC

DRAWN

Mar-11-20

CHECKED

APPROVED

TITLE:

Lower Mounting Plate

DWG. NO.

ECE-1531

REV

01

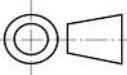
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DO NOT SCALE

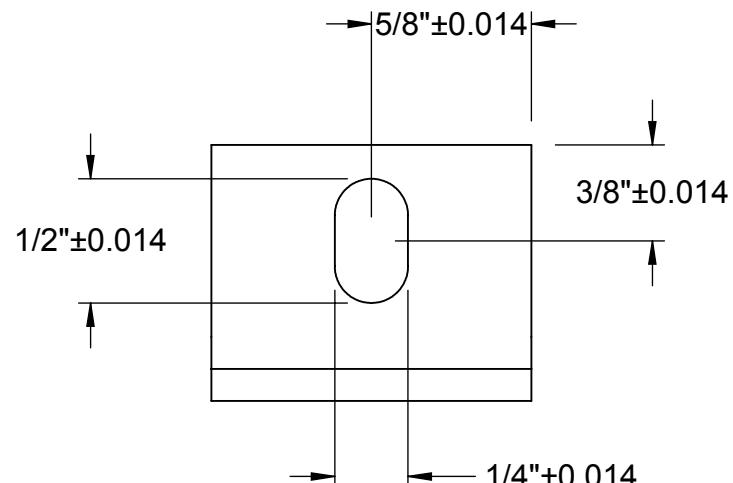
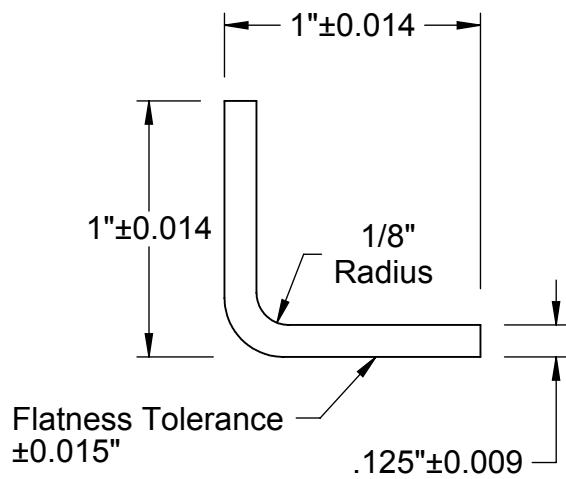
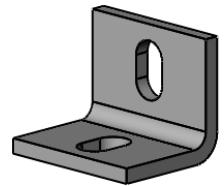
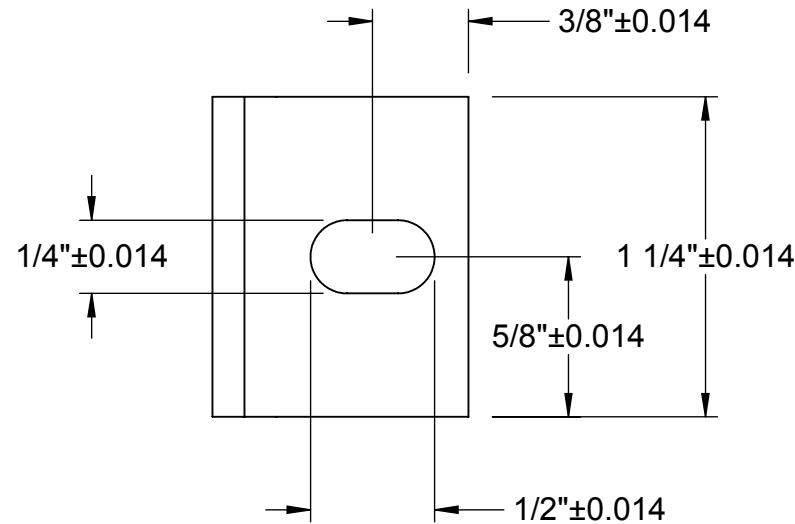
SHEET 2 OF 2

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D
C
B
A



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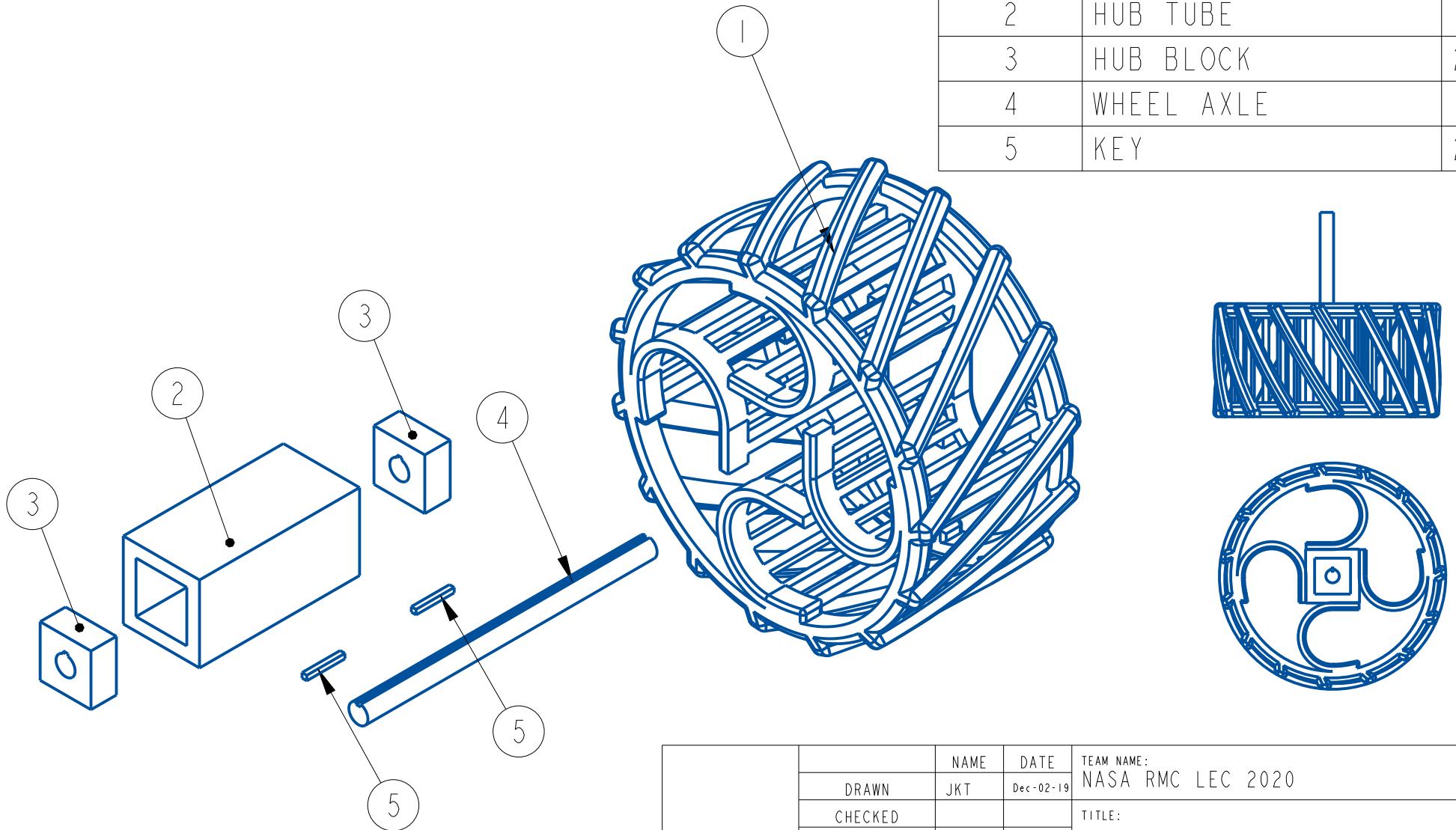
Information in this drawing is provided for reference only.

PART
NUMBER

2313N48

Corner
Machine Bracket

ITEM NO	DESCRIPTION	QTY
1	WHEEL INTERNAL	1
2	HUB TUBE	1
3	HUB BLOCK	2
4	WHEEL AXLE	1
5	KEY	2



UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES 125 OR BETTER

		NAME	DATE	TEAM NAME: NASA RMC LEC 2020
	DRAWN	JKT	Dec-02-19	TITLE: WHEEL ASSEMBLY
	CHECKED			
	APPROVED			
MATERIAL 6061 Aluminum	FINISHED PART			
FINISH NONE				
COMMENTS:			DWG. NO.	
			W-1000-001	
			REV 001	
SCALE: 0.250 DO NOT SCALE			SHEET 1 OF 1	

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W-1000-001 Wheel Assembly

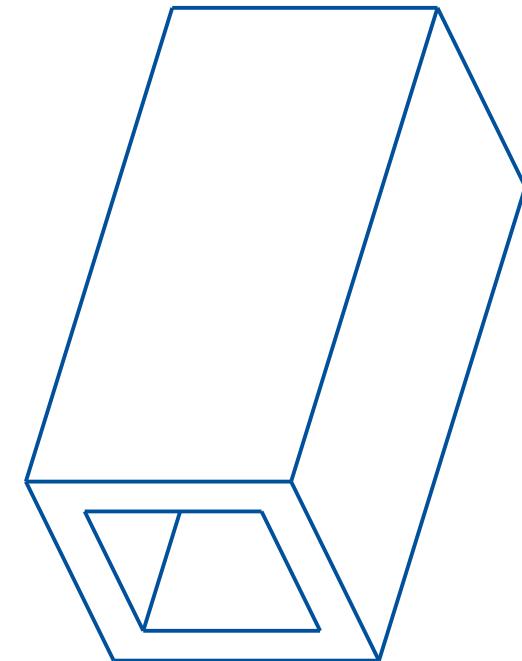
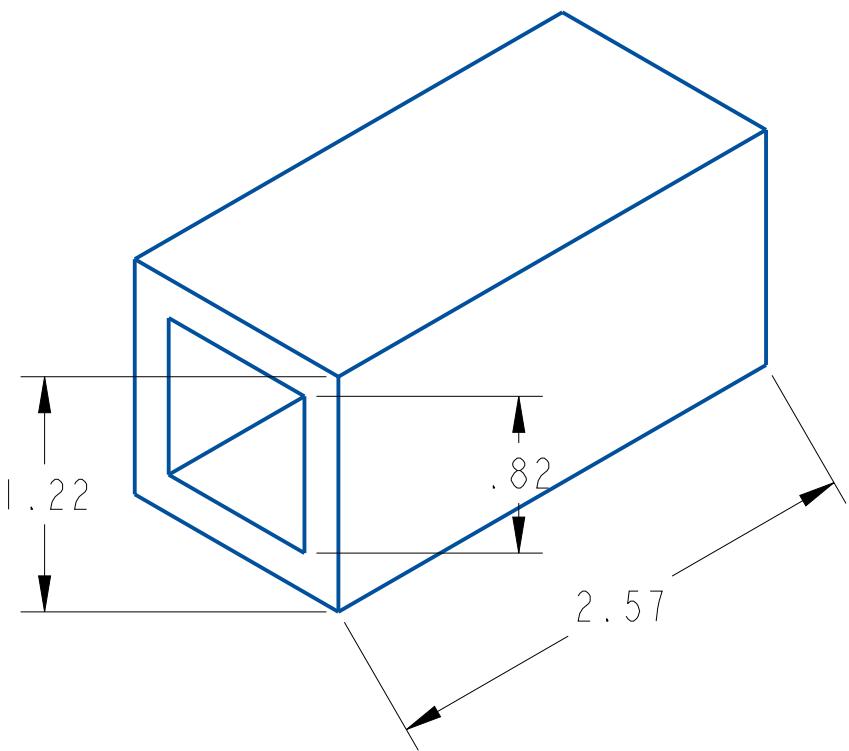
W-1100-001 Wheel Internal

W-1200-001 Hub Tube

W-1300-001 Hub Block

W-1400-001 Wheel Axle

W-1500-001 Wheel Key



SCALE 1.000



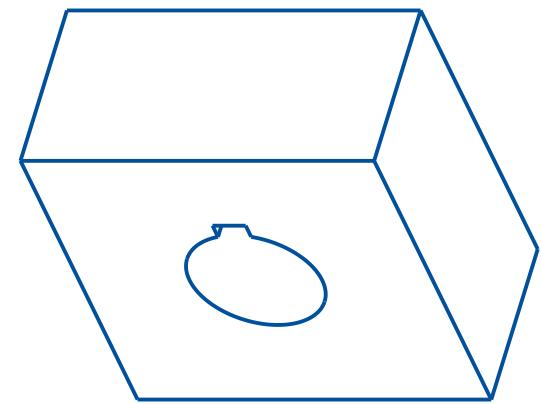
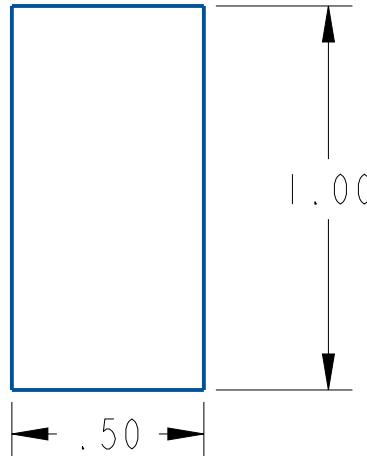
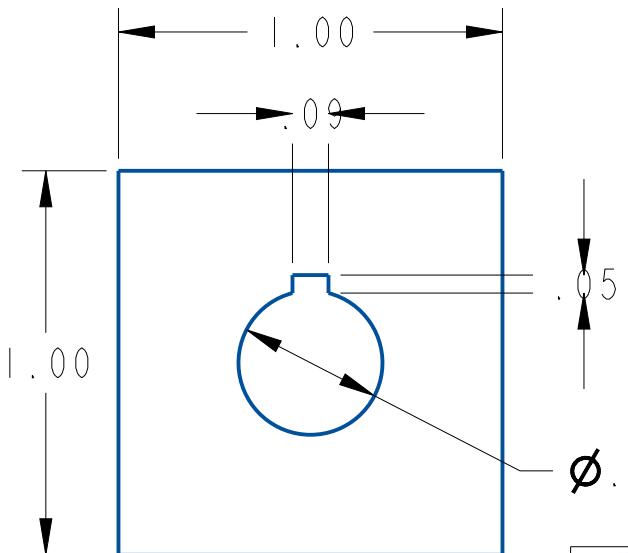
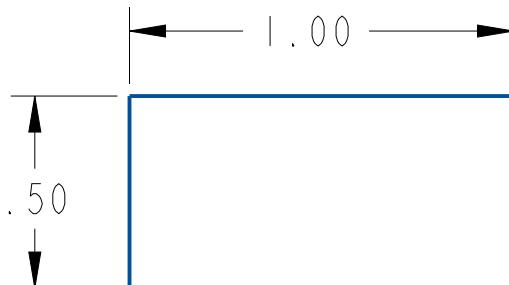
UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES OR [] ARE
IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^\circ$
ALL FINISHES I25 OR BETTER

PROPRIETARY AND CONFIDENTIAL 		NAME	DATE	TEAM NAME: NASA RMC: LEC
	DRAWN	PP	Dec-03-19	
	CHECKED			
	APPROVED			
MATERIAL -	FINISHED PART			
FINISH -				
COMMENTS:			DWG. NO.	REV
			W-1200	001
			SCALE: 1.000	SHEET 1 OF 1



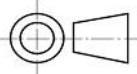
SCALE 2.000

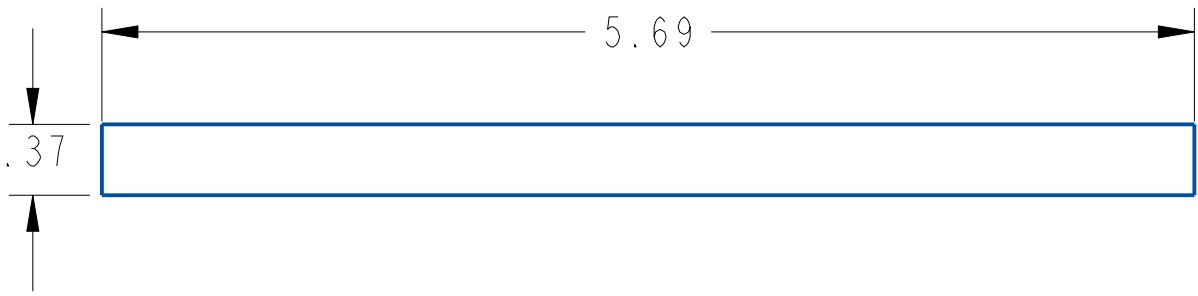


<u>UNLESS OTHERWISE SPECIFIED:</u>	NAME	DATE	TEAM NAME:
DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS	PP	Dec-03-19	NASA RMC LEC 2020
REMOVE ALL BURRS AND SHARP EDGES	CHECKED		TITLE:
MAX ALLOWED 0.032 [0.81]	APPROVED		Hub Block
REMOVED	MATERIAL -	FINISHED PART	
FINISH -			
COMMENTS:	DWG. NO.	REV	
	W-1300	001	
	SCALE: 1.000		SHEET 1 OF 1

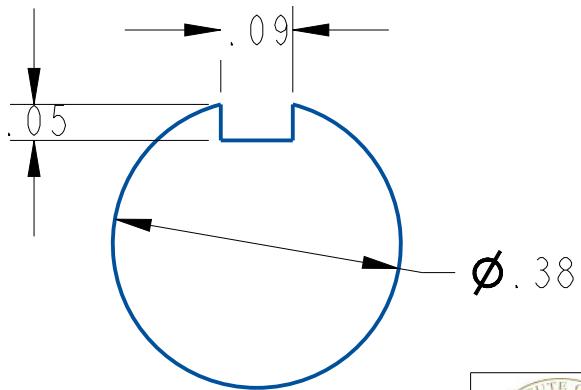
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SCALE 1.000



SCALE 4.000

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DIMENSIONS ARE IN INCHES OR [] ARE IN MILLIMETERS

REMOVE ALL BURRS AND SHARP EDGES
MAX ALLOWED 0.032 [0.81]

TWO PLACE DECIMAL ± 0.030 [0.4]
THREE PLACE DECIMAL ± 0.005 [0.2]
ANGULAR $\pm 2^{\circ}$
ALL FINISHES 125 OR BETTER



MATERIAL -

FINISH -

COMMENTS:

	NAME	DATE
DRAWN	PP	Dec-03-19
CHECKED		
APPROVED		

TEAM NAME:
NASA RMC:LEC

TITLE:

Wheel-Axle

DWG. NO.

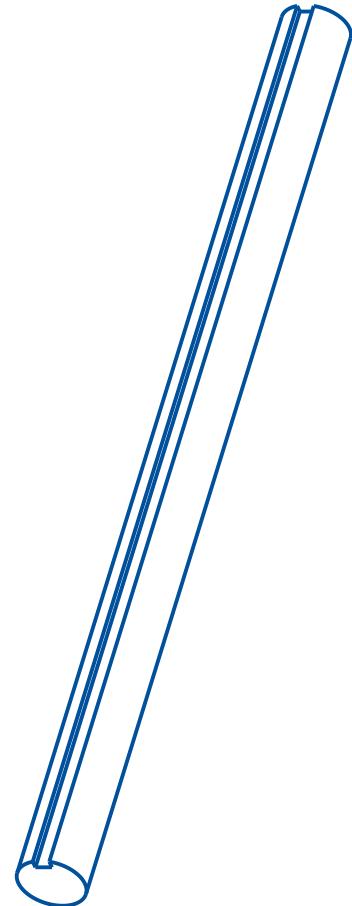
W-1400

REV

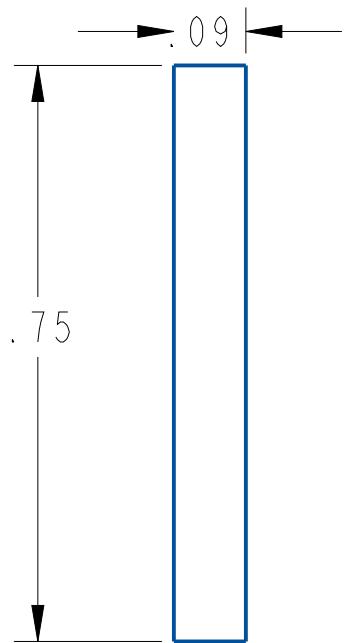
001

SCALE: 0.500

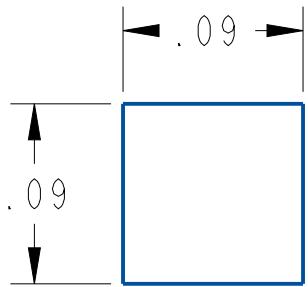
SHEET 1 OF 1



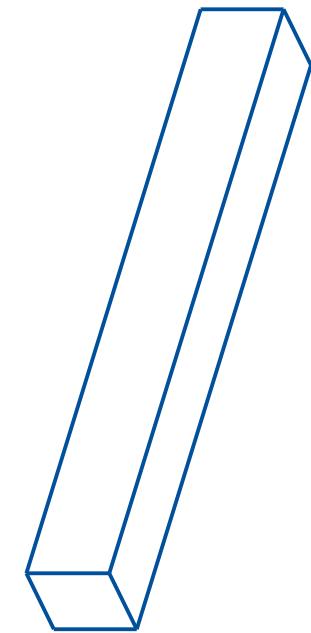
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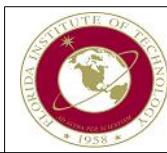
SCALE 4.000



SCALE 10.000



SCALE 5.000



MATERIAL -

FINISH -

COMMENTS:

NAME

DRAWN

CHECKED

APPROVED

DATE

PP

TEAM NAME:
NASA RMC: LEC

TITLE:

Wheel Key

REV

001

DWG. NO.

W-1500

SHEET 1 OF 1

SCALE: 2.000

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