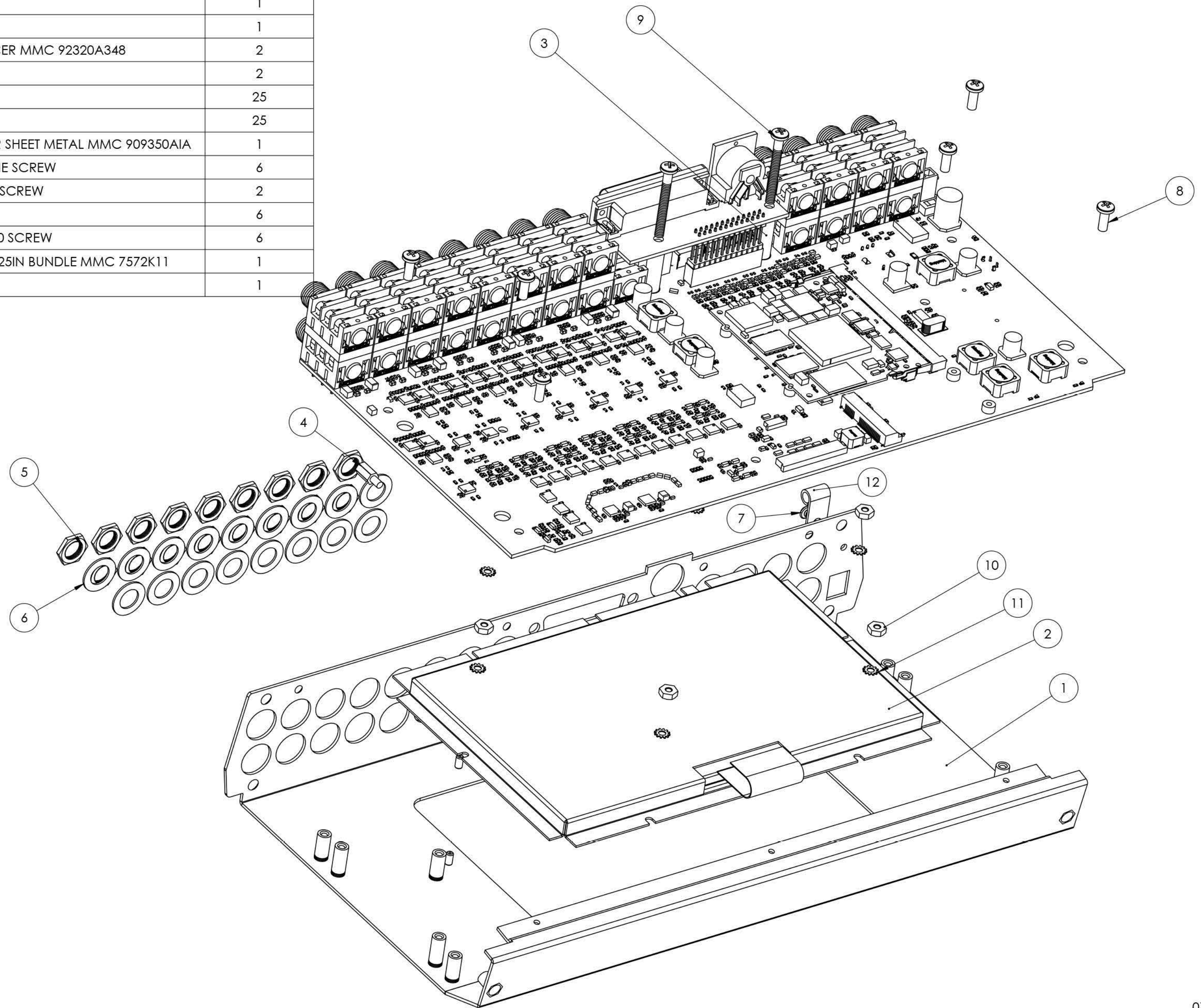


07.15.2017

TITLE SM-MA-101 (MIMIC MASTER ASSEMBLY)		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:2	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A		SHEET SIZE DO NOT SCALE DRAWING	
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: x.xx = +/- 0.005 x.xx = +/- 0.01 x.x = +/- 0.05 x = +/- 0.1 = .5X LINEAR RADI: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg		FINISH: AS CAST, AS MACHINED 010" MAX FINISH: BREAK ALL SHARP CORNERS		
		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		

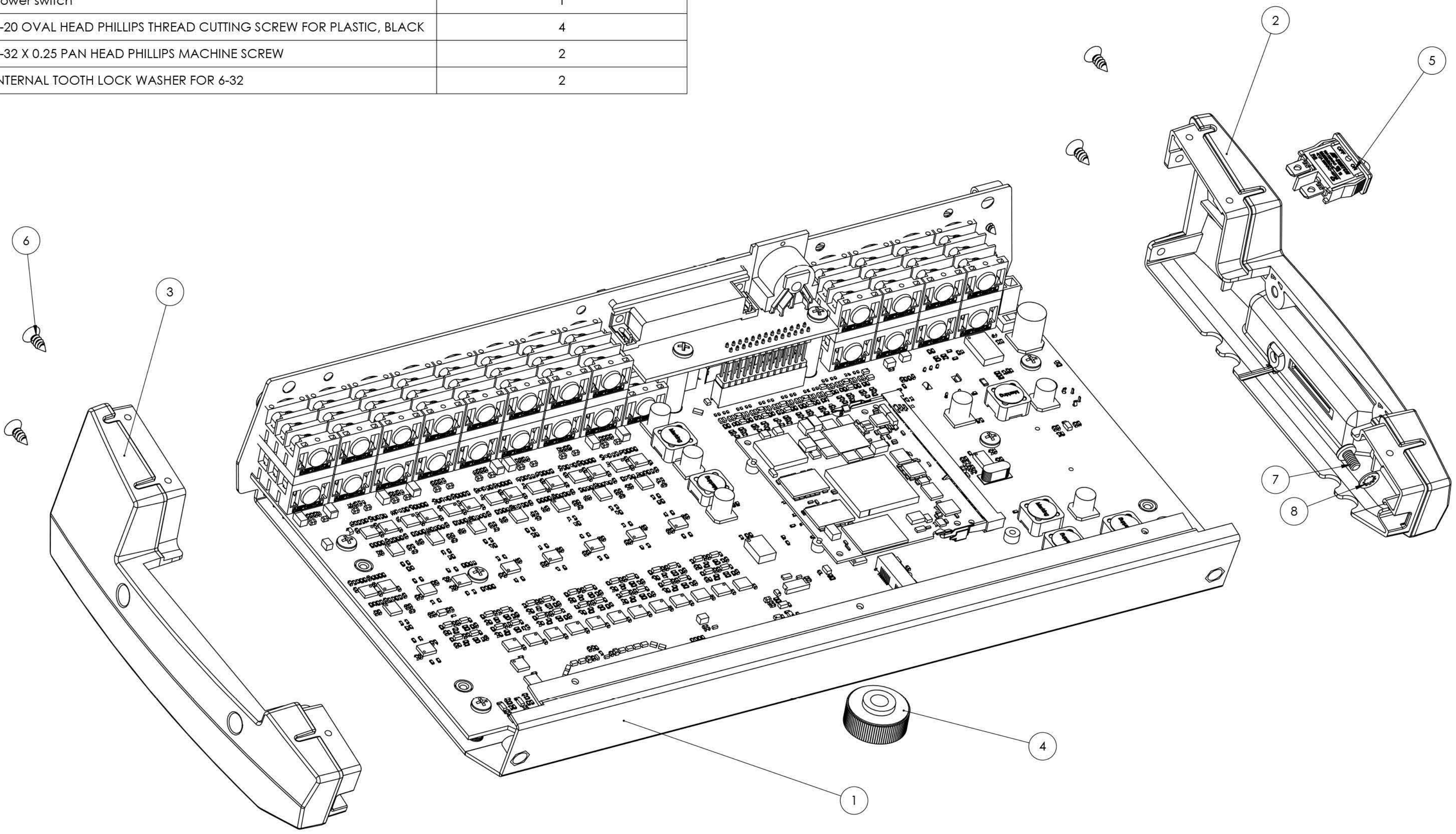
ITEM NO.	PART NUMBER	QTY.
1	SM-MP-101 (TOP PANEL)	1
2	SM-SA-102 (DISPLAY MODULE ASSEMBLY)	1
3	0.875IN X .25IN FOR 6-32 SS UNTHRD SPACER MMC 92320A348	2
4	DB25 SCREW CONNECTOR	2
5	M9 X 0.5MM NUT FOR 1/4 IN JACK	25
6	WASHER FOR 0.25 JACK	25
7	6-32 X .25 PAN HEAD PHILLIPS SCREW FOR SHEET METAL MMC 909350A1A	1
8	6-32 X .375IN PHILLIPS PAN HEAD MACHINE SCREW	6
9	6-32 X 1.25 PAN HEAD PHILLIPS MACHINE SCREW	2
10	4-40 HEX NUT	6
11	EXTERNAL TOOTH LOCK WASHER FOR 4-40 SCREW	6
12	SCREW-IN MOUNT CABLE HOLDER FOR .125IN BUNDLE MMC 7572K11	1
13	MIMIC MOTHERBOARD	1



07.15.2017

TITLE SM-SA-101 (TOP PANEL ASSEMBLY)		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	DO NOT SCALE DRAWING		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: x.xxx = +/- 0.005 FRACT: AS CAST, AS MACHINED 010" MAX x.xx = +/- 0.01 AS CAST, AS MACHINED 010" MAX x.x = +/- 0.05 FINISH: BREAK ALL SHARP CORNERS x = +/- 0.1 RAD: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg				
		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		

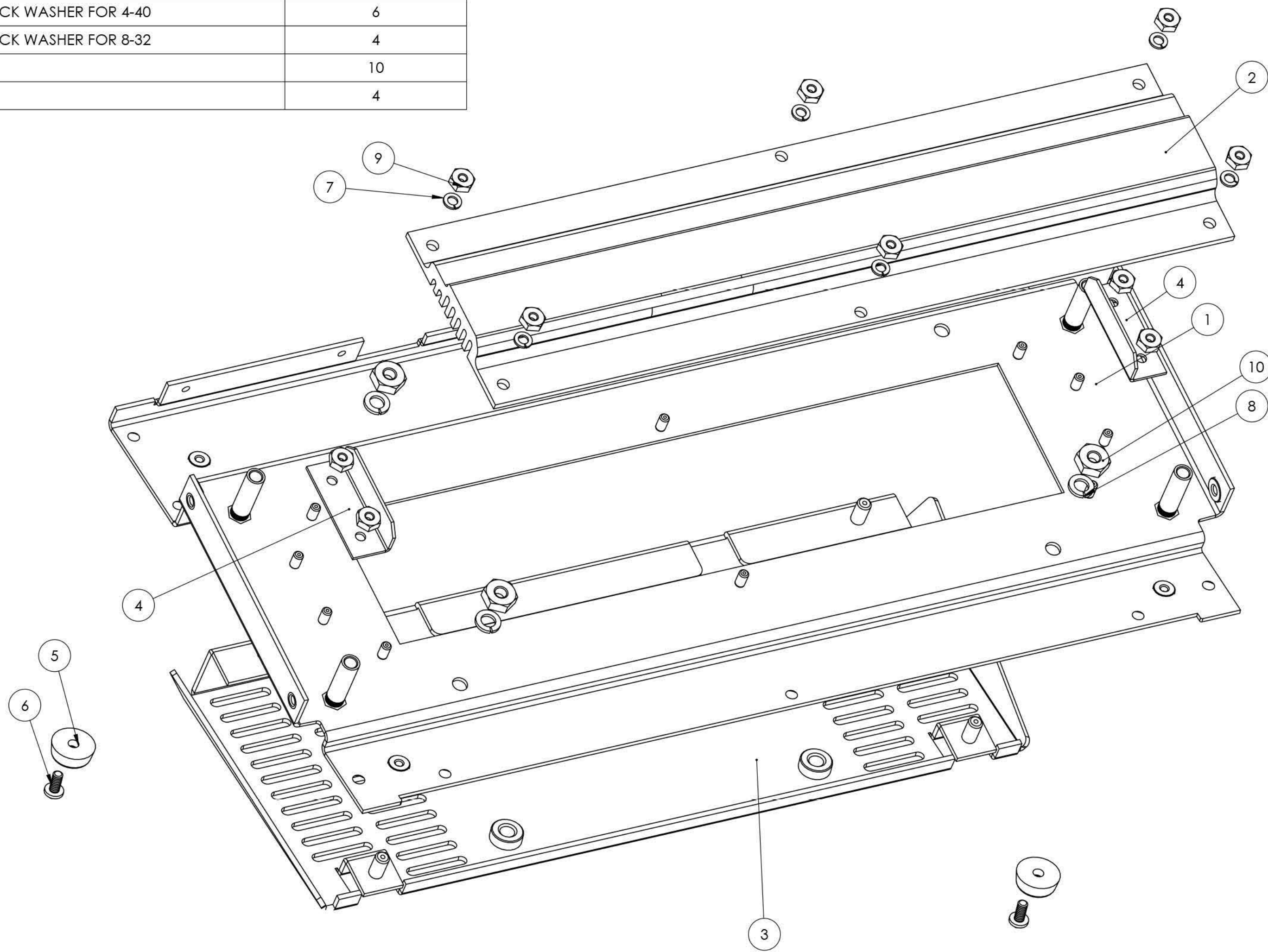
ITEM NO.	PART NUMBER	ENDCAP INSTALLATION/QTY.
1	SM-SA-101 (TOP PANEL ASSEMBLY)	1
2	SM-PP-101 (LEFT END CAP)	1
3	SM-PP-102 (RIGHT END CAP)	1
4	SM-MACHP-101 21.5MM DIA 8MM METAL KNOB	1
5	Power switch	1
6	6-20 OVAL HEAD PHILLIPS THREAD CUTTING SCREW FOR PLASTIC, BLACK	4
7	6-32 X 0.25 PAN HEAD PHILLIPS MACHINE SCREW	2
8	INTERNAL TOOTH LOCK WASHER FOR 6-32	2



07.15.2017

TITLE SM-MA-101 (MIMIC MASTER ASSEMBLY) 1		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION ENDCAP INSTALLATION (ASSEMBLY STEP 1)		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	DO NOT SCALE DRAWING		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: x.xxx = +/- 0.005 FRACT: AS CAST, AS MACHINED 010' MAX x.xx = +/- 0.01 AS CAST, AS MACHINED 010' MAX x.x = +/- 0.05 FINISH: BREAK ALL SHARP CORNERS x = +/- 0.1 RADII: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg				
		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindeldesign.com		

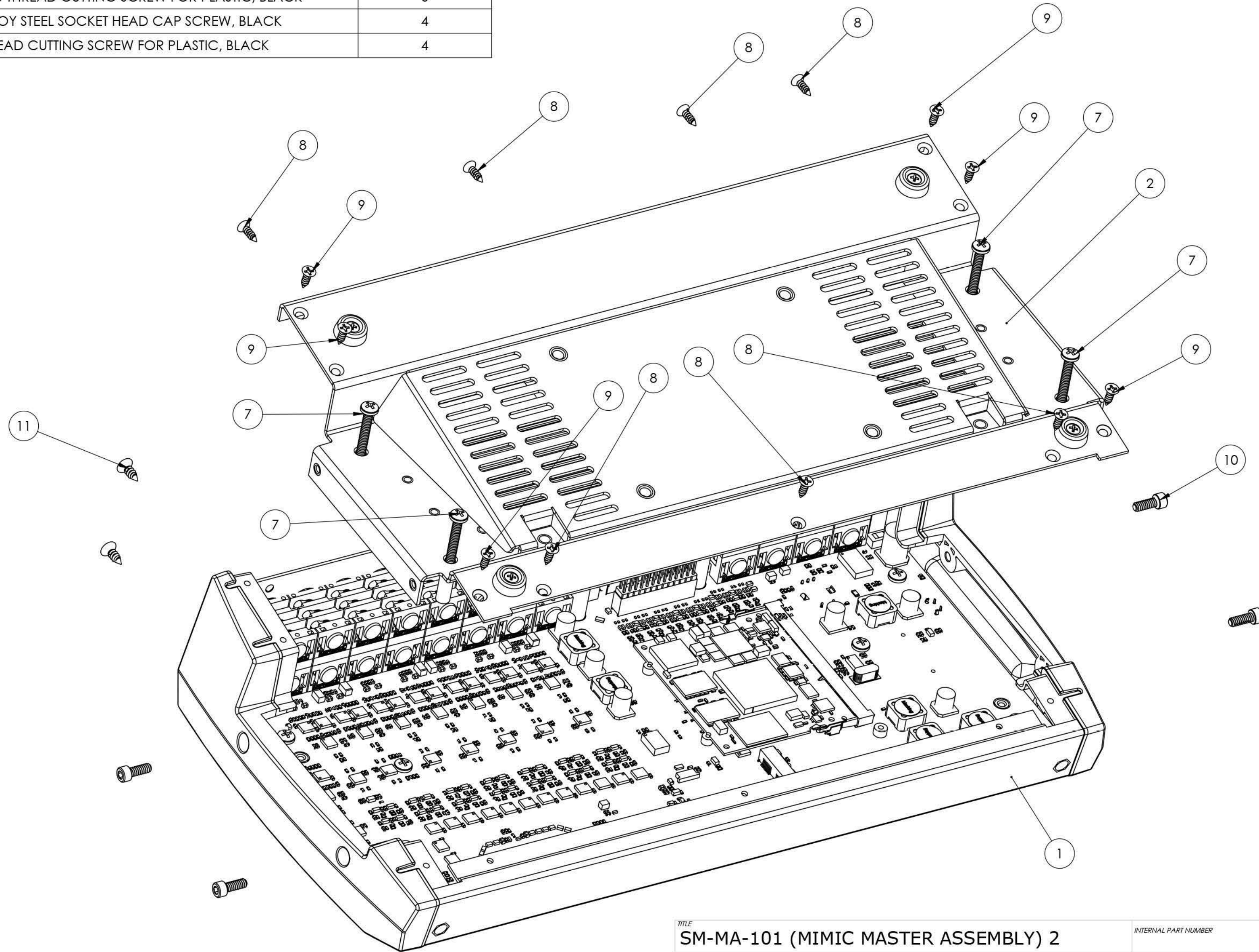
ITEM NO.	PART NUMBER	QTY.
1	SM-MP-102 (BOTTOM PANEL)	1
2	SM-MMP-101D (EXTRUDED HEAT SINK)	1
3	SM-MP-104C (MOUNT ADAPTOR PLATE)	1
4	SM-MP-105 (EXTRUSION EMI PANEL)	2
5	BUMPER 0.5IN DIA WITH .125IN HOLE MMC 9540K42	4
6	4-40 X 0.25 BLACK PAN HEAD PHILLIPS MACHINE SCREW	4
7	REGULAR SPRING LOCK WASHER FOR 4-40	6
8	REGULAR SPRING LOCK WASHER FOR 8-32	4
9	4-40 HEX NUT	10
10	8-32 HEX NUT	4



07.15.2017

TITLE SM-SA-103 (BOTTOM PANEL ASSEMBLY)		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	SHEET SIZE DO NOT SCALE DRAWING		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: x.xxx = +/- 0.005 FRACT: AS CAST, AS MACHINED 010' MAX x.xx = +/- 0.01 AS CAST, AS MACHINED 010' MAX x.x = +/- 0.05 FINISH: BREAK ALL SHARP CORNERS x = +/- 0.1 RADII: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg				
		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindeldesign.com		

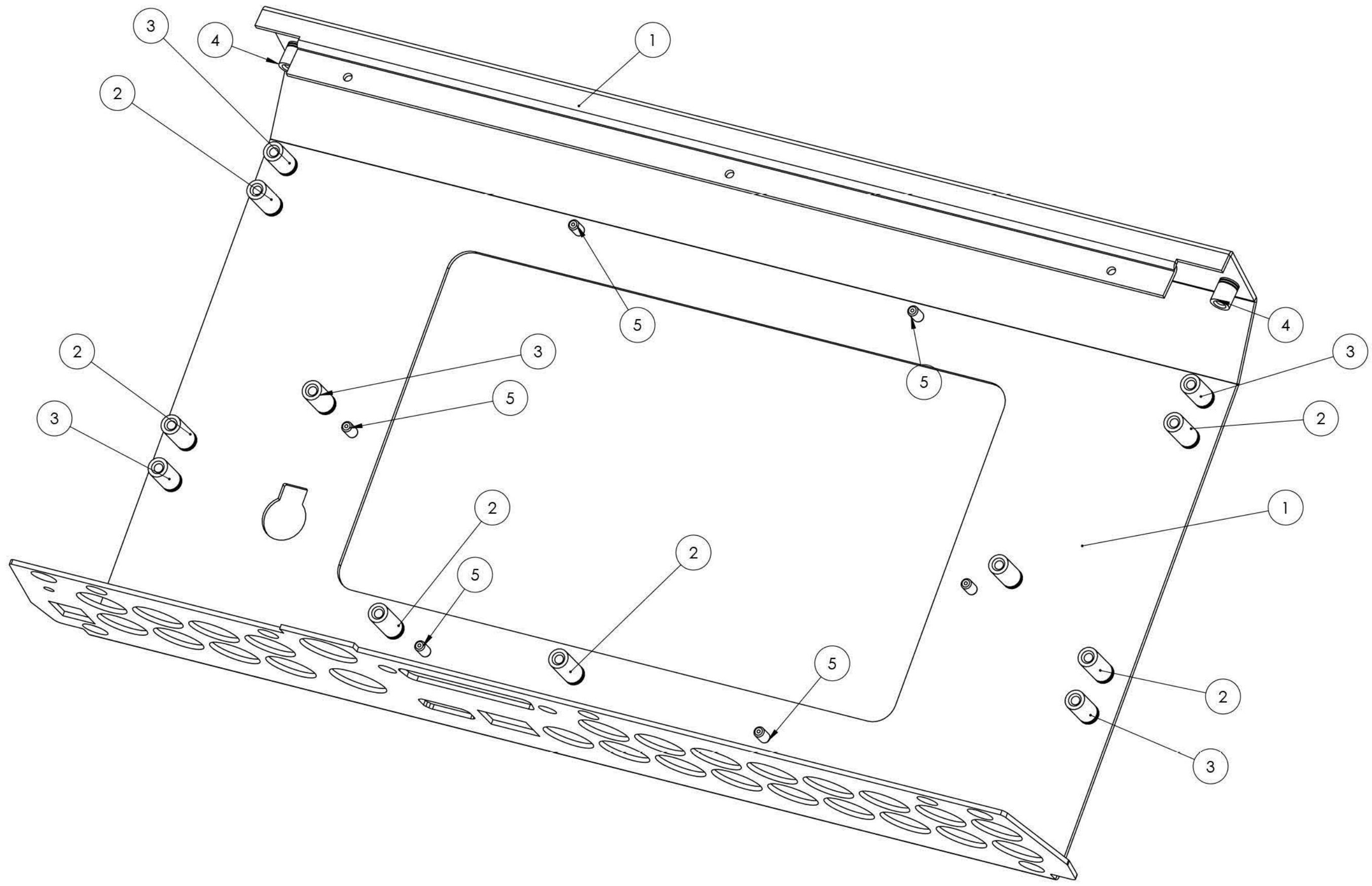
BOM Table		
ITEM NO.	PART NUMBER	BOTTOM PANEL INSTALLATION/QTY.
1	SM-SA-101 (TOP PANEL ASSEMBLY)	1
2	SM-SA-103 (BOTTOM PANEL ASSEMBLY)	1
7	6-32 X 1.0 PAN HEAD PHILLIPS MACHINE SCREW, BLACK	4
8	4-24 X .375 FLAT HEAD PHILLIPS SCREW FOR SHEET METAL, BLACK	7
9	4-24 X .375 FLAT HEAD PHILLIPS THREAD CUTTING SCREW FOR PLASTIC, BLACK	6
10	6-32 X .375 BLACK-OXIDE ALLOY STEEL SOCKET HEAD CAP SCREW, BLACK	4
11	6-20 OVAL HEAD PHILLIPS THREAD CUTTING SCREW FOR PLASTIC, BLACK	4



07.15.2017

TITLE SM-MA-101 (MIMIC MASTER ASSEMBLY) 2		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION BOTTOM PANEL INSTALLATION (ASSEMBLY STEP 2)		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	DO NOT SCALE DRAWING		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: x.xxx = +/- 0.005 FRACT: AS CAST, AS MACHINED 010' MAX x.xx = +/- 0.01 FINISH: BREAK ALL SHARP CORNERS x.x = +/- 0.05 x = +/- 0.1 RADII: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg				
		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		

ITEM NO.	PART NUMBER	QTY.
1	SM-MP-101 (TOP PANEL)	1
2	PENN 6-32 X .5625IN BLIND THREADED STANDOFF BSOS-632-18	6
3	PENN 6-32 X 0.50IN BLIND THREADED STANDOFF BSOS-632-16	8
4	PENN 6-32 X .3125IN BLIND THREADED STANDOFF BSOS-632-10	2
5	PENN 4-40 X .25IN SELF CLINCHING STUD FHS-440-4	6



07.15.2017

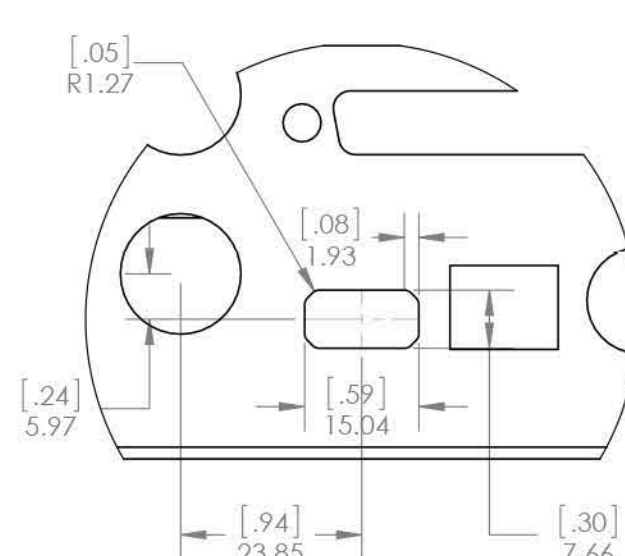
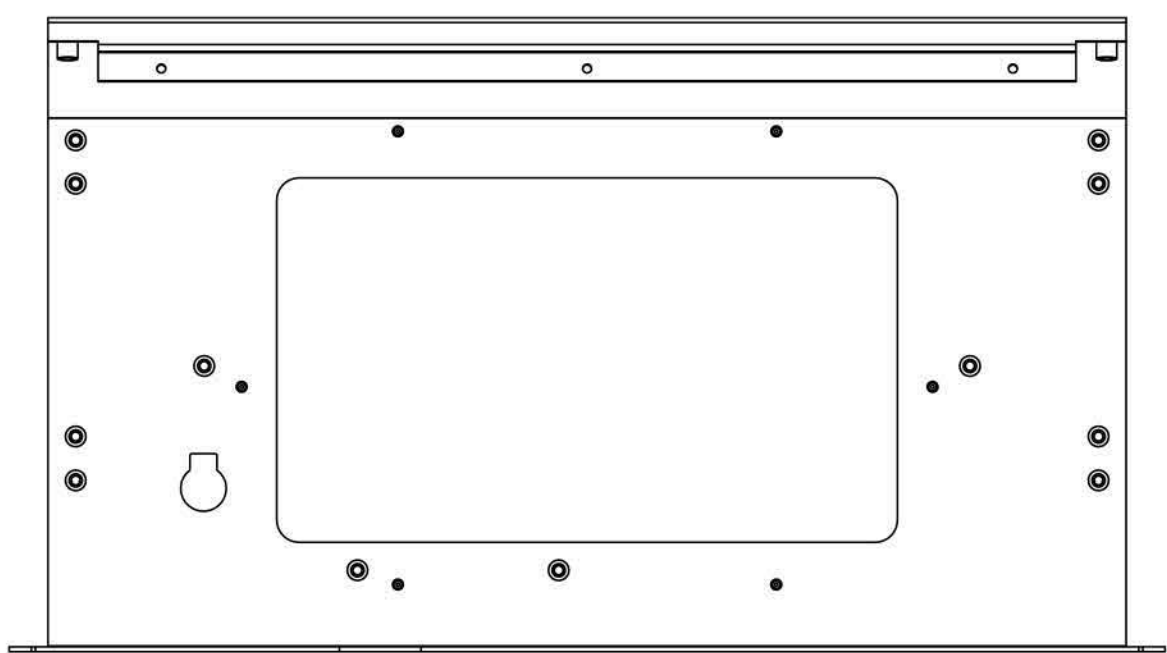
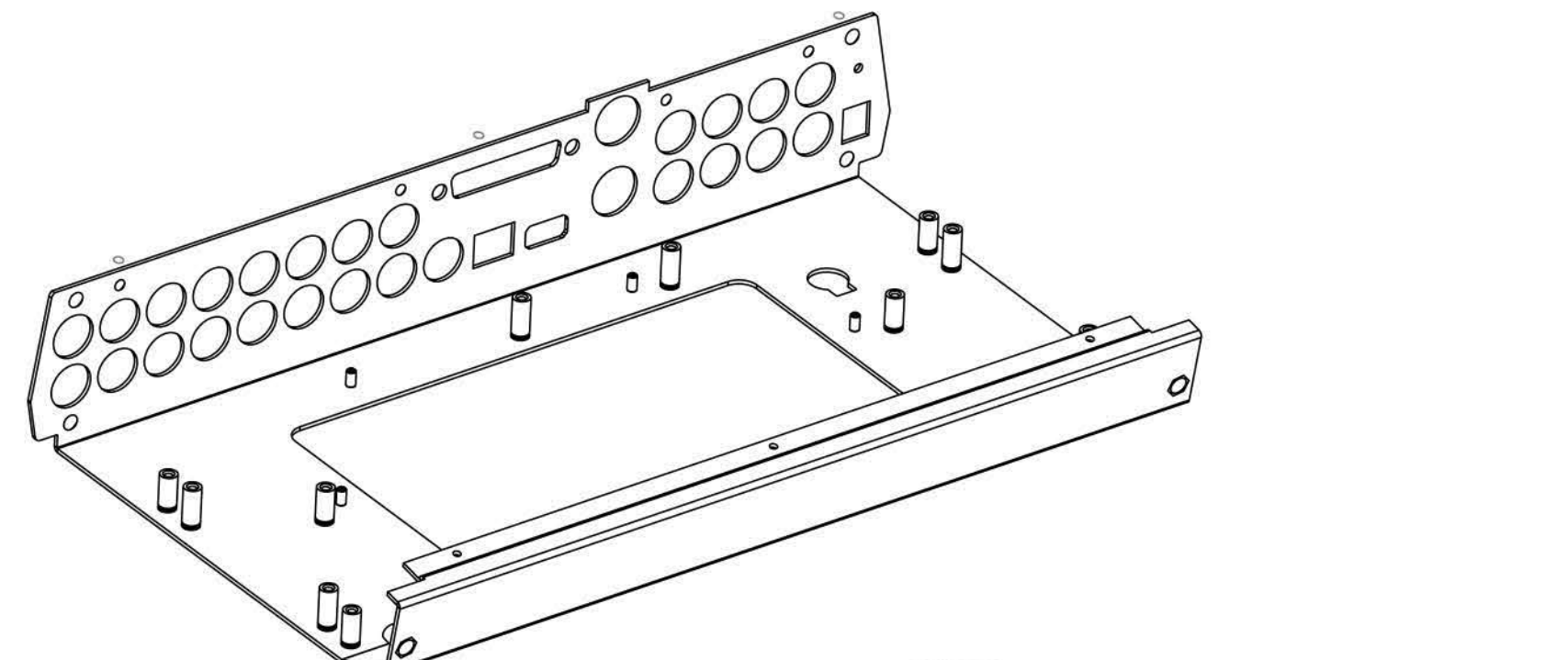
TITLE SM-MP-101 (TOP PANEL)		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	SHEET SIZE DO NOT SCALE DRAWING		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: x.xxx = +/- 0.005 FRACT: AS CAST, AS MACHINED 010' MAX x.xx = +/- 0.01 AS CAST, AS MACHINED 010' MAX x.x = +/- 0.05 FINISH: BREAK ALL SHARP CORNERS x = +/- 0.1 RADII: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		

NOTES: UNLESS OTHERWISE SPECIFIED (OVERRIDES TITLE BLOCK)

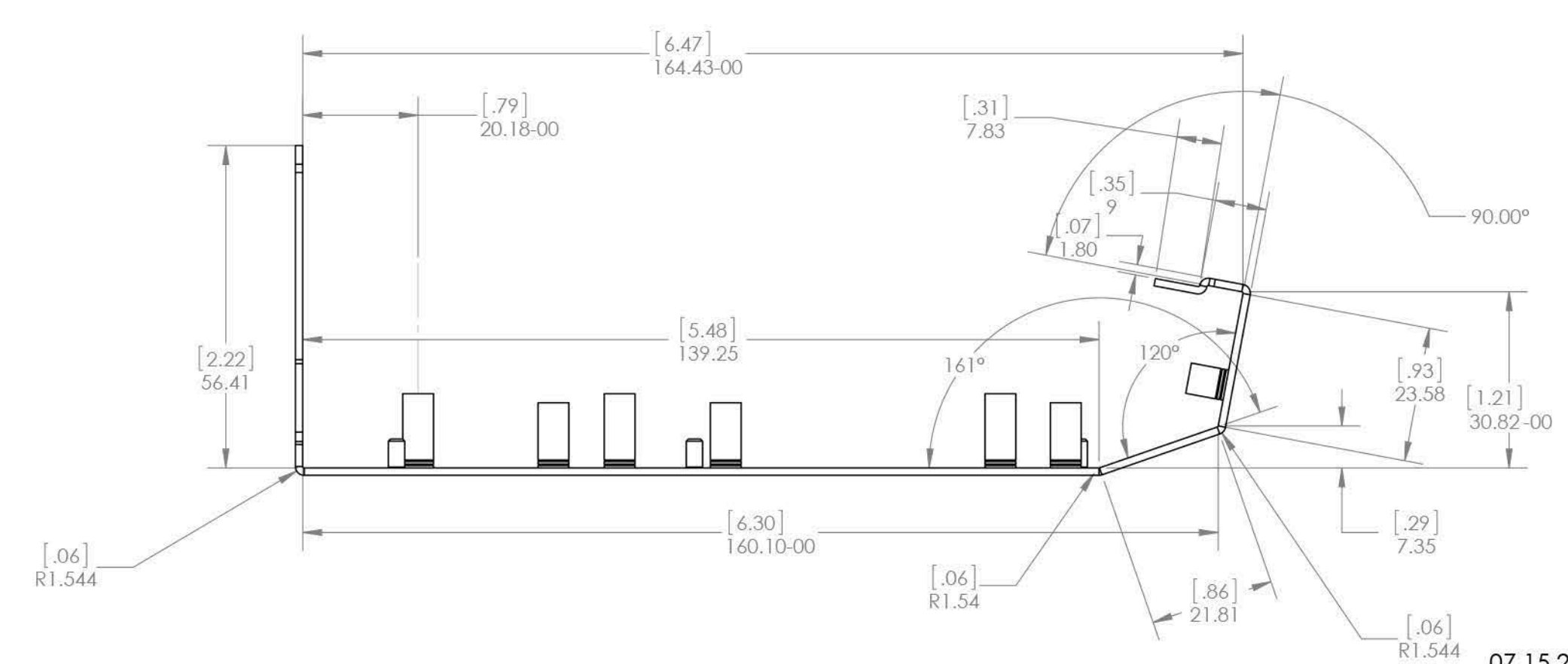
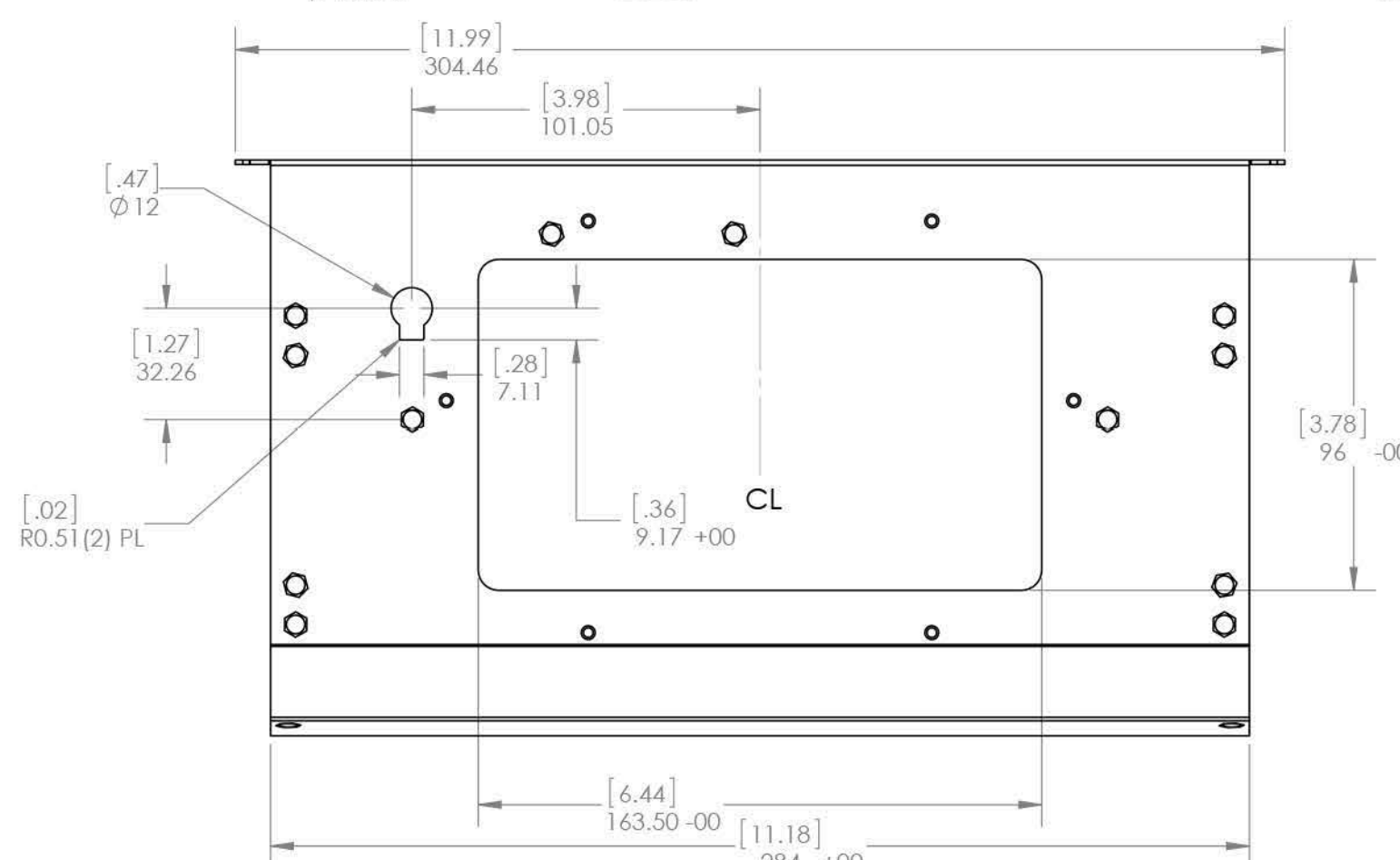
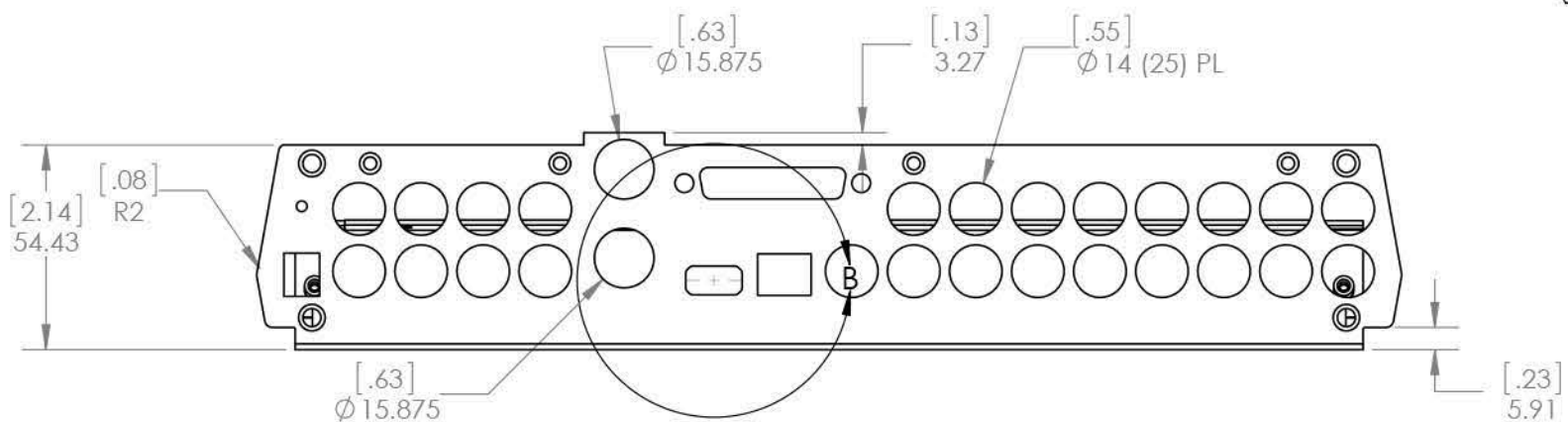
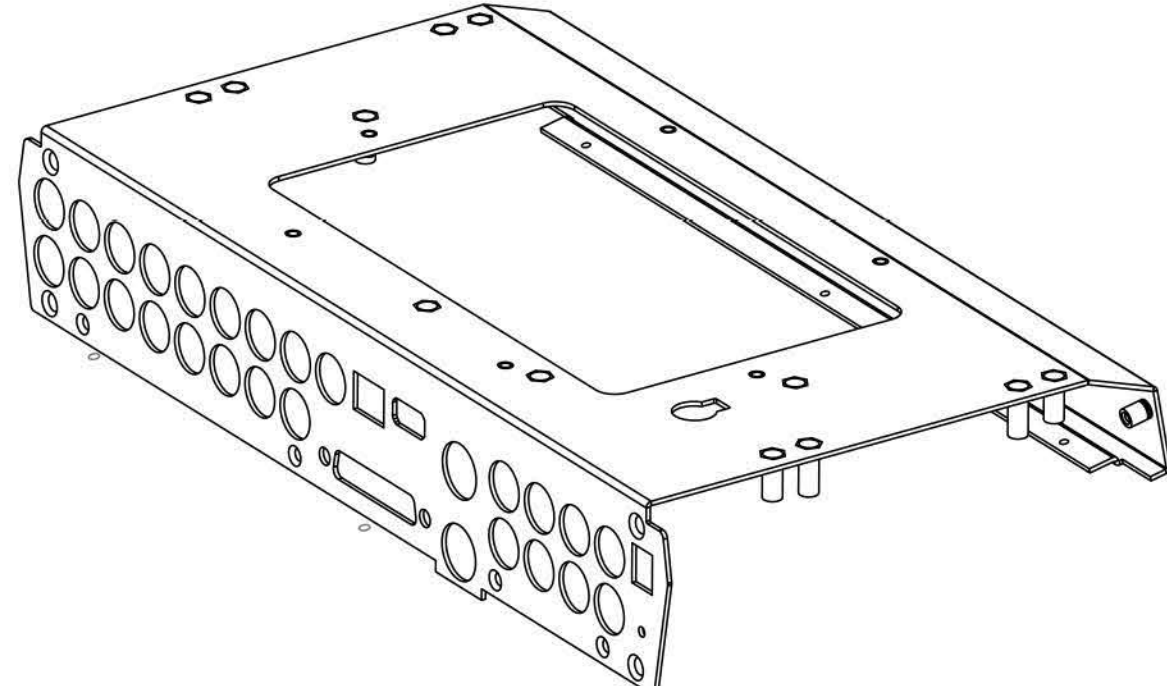
1. MATERIAL: CR SHEET STEEL
2. THICKNESS: 0.052" (18 Ga STEEL)
3. Inside Bend RAD = THICKNESS EXCEPT AS NOTED
4. All Cartesian dimensions, and dimensions originating from centerline are typical to the opposing features.
5. TOLERANCES: Linear +/- 0.015. Positional +/- 0.015". Diametral +/- 0.005". Angular +/- 0.25 degrees.
6. All dimensions are pre-finish.
7. Interpret drawing per ANSI y14.5-1982.
8. Dimensions are critical. All other features are arbitrary.

FINISHING:

1. Remove all sharp edges to .01" MAX.
2. Appearance surfaces to be free of cosmetic flaws including, but not limited to: extrusion lines, scratches, dents, tool marks, racking marks.
3. PRE-FINISHING: None.
4. MASKING: None.
5. RACKING: None.
6. FINISHING: None.
7. Package to protect during shipping, storage and handling.



DETAIL B
SCALE 1:1



07.15.2017

TITLE SM-MP-101 (TOP PANEL) 2		INTERNAL PART NUMBER	REVISION H	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:2	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	SHEET SIZE DO NOT SCALE DRAWING		

TOLERANCES AND FINISHES UNLESS STATED OTHERWISE:
 LINEAR: x.xxx = +/- 0.005
 x.xx = +/- 0.01
 x.x = +/- 0.05
 x = +/- 0.1
 RAD: = .5X LINEAR
 ANGULAR: x.xx = +/- 0.05 deg
 x.x = +/- 0.1 deg
 x = +/- 0.5 deg
 FRACT: AS CAST, AS MACHINED 010' MAX
 FINISH: BREAK ALL SHARP CORNERS

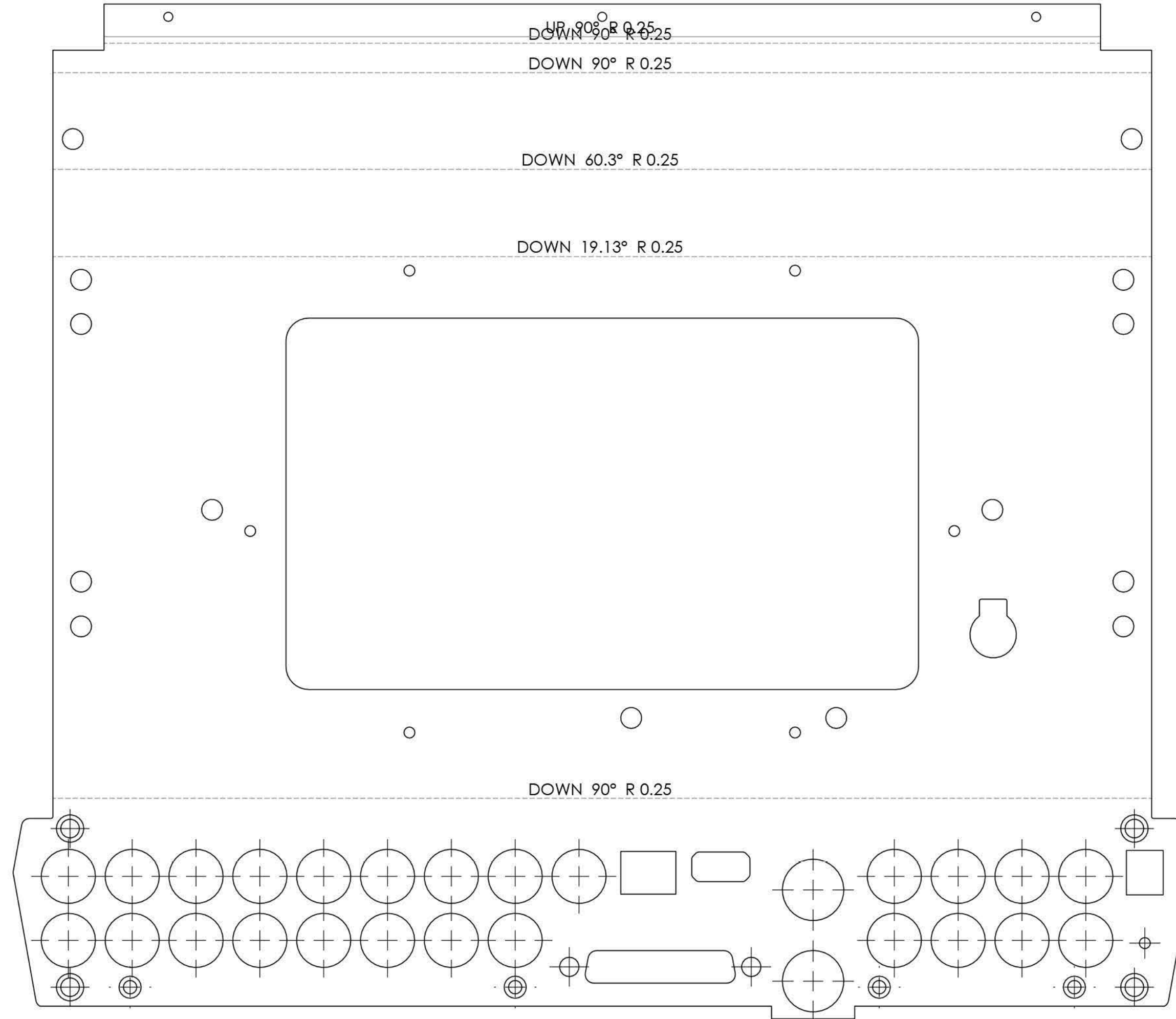
SPINDEL DESIGN
 PO BOX 3446 Los Angeles CA 91394
 818.363.3456 www.spindel.com

NOTES: UNLESS OTHERWISE SPECIFIED (OVERRIDES TITLE BLOCK)

1. MATERIAL: CR SHEET STEEL
2. THICKNESS: 0.052" (18 Ga STEEL)
3. Inside Bend RAD = THICKNESS EXCEPT AS NOTED
4. All Cartesian dimensions, and dimensions originating from centerline are typical to the opposing features.
5. TOLERANCES: Linear +/- 0.015. Positional +/- 0.015". Diametral +/-0.005". Angular +/- 0.25 degrees.
6. All dimensions are pre-finish.
7. Interpret drawing per ANSI y14.5-1982.
8. Dimensions are critical. All other features are arbitrary.

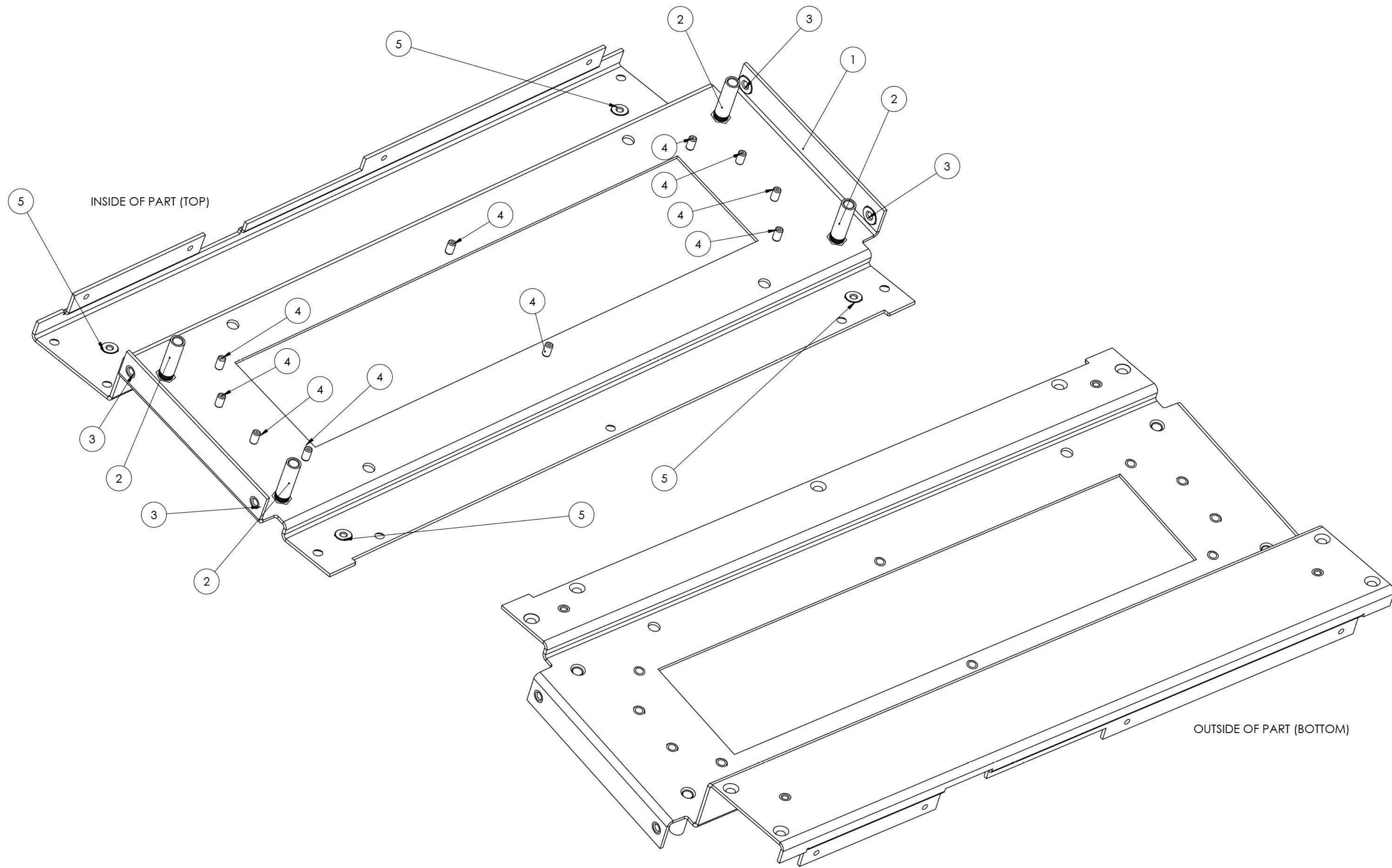
FINISHING:

1. Remove all sharp edges to .01" MAX.
2. Appearance surfaces to be free of cosmetic flaws including, but not limited to: extrusion lines, scratches, dents, tool marks, racking marks.
3. PRE-FINISHING: None.
4. MASKING: None.
5. RACKING: None.
6. FINISHING: None.
7. Package to protect during shipping, storage and handling.



07.15.2017

TITLE SM-MP-101 (TOP PANEL) 3		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER		CLIENT Steven Slate		MATERIAL
DRAWING NAME		CREATION DATE 09/17/2016	DRAWN BY R. Spindel	
VENDOR Various		VENDOR STOCK NUMBER N/A		SCALE SCALE: 1:1
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE:		SCALE SCALE: 1:1		SHEET COUNT SHEET 1 OF 1
LINEAR: x.xxx = +/- 0.005 x.xx = +/- 0.01 x.x = +/- 0.05 x = +/- 0.1 RADII: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg		FRACT: AS CAST, AS MACHINED 010" MAX FINISH: BREAK ALL SHARP CORNERS		SHEET SIZE DO NOT SCALE DRAWING
		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		



07.15.2017

TITLE SM-MP-102 (BOTTOM PANEL)		INTERNAL PART NUMBER	REVISION A	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME Various	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	SHEET SIZE A		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE:		DO NOT SCALE DRAWING		
LINEAR: x.xxx = +/- 0.005 x.xx = +/- 0.01 x.x = +/- 0.05 x = +/- 0.1 RADI: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg		FRACT: AS CAST, AS MACHINED 010' MAX FINISH: BREAK ALL SHARP CORNERS		
		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindeldesign.com		

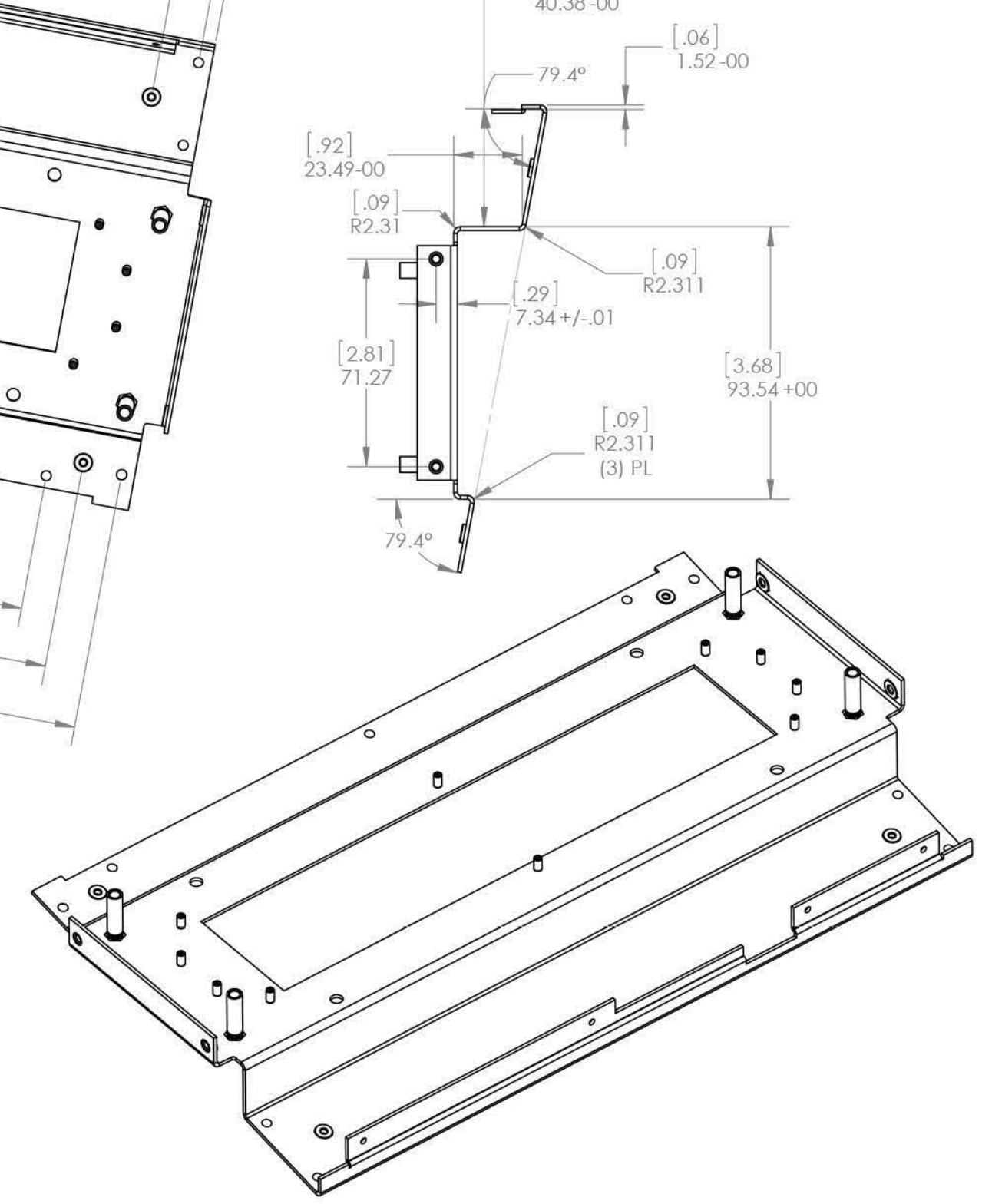
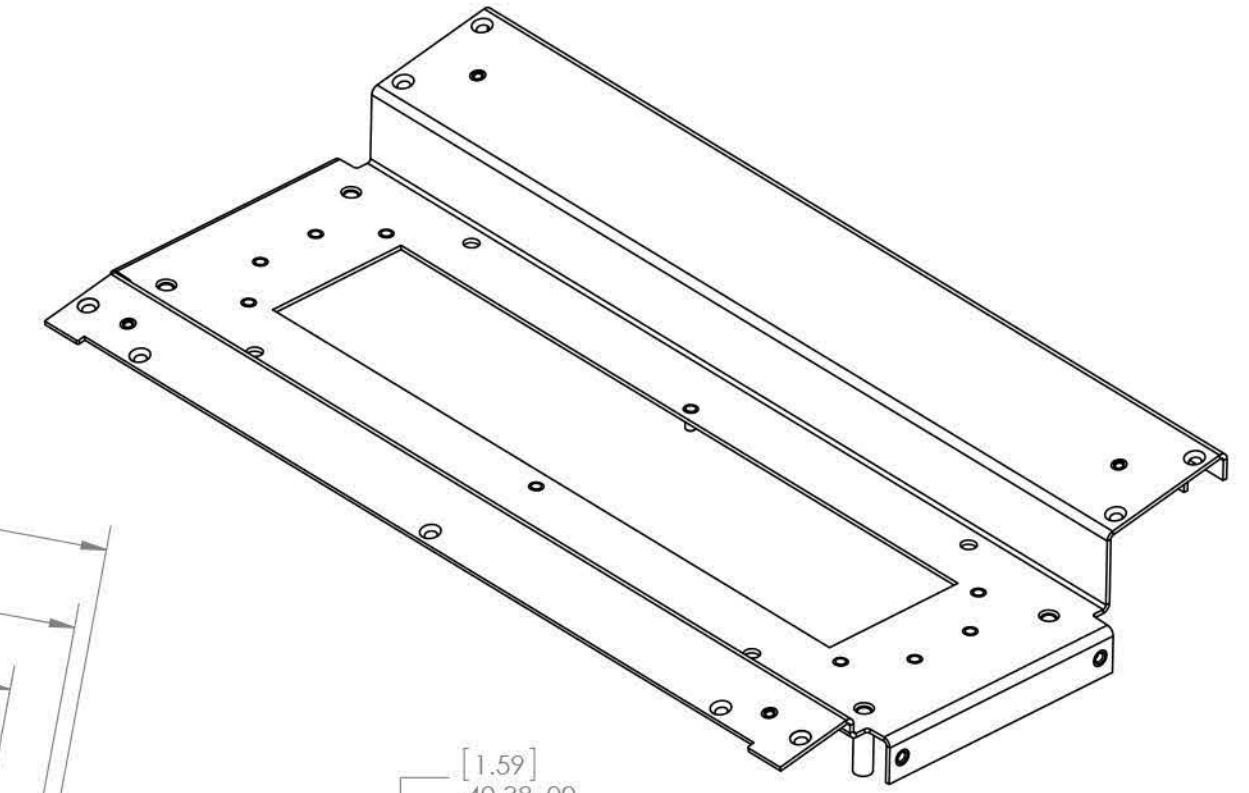
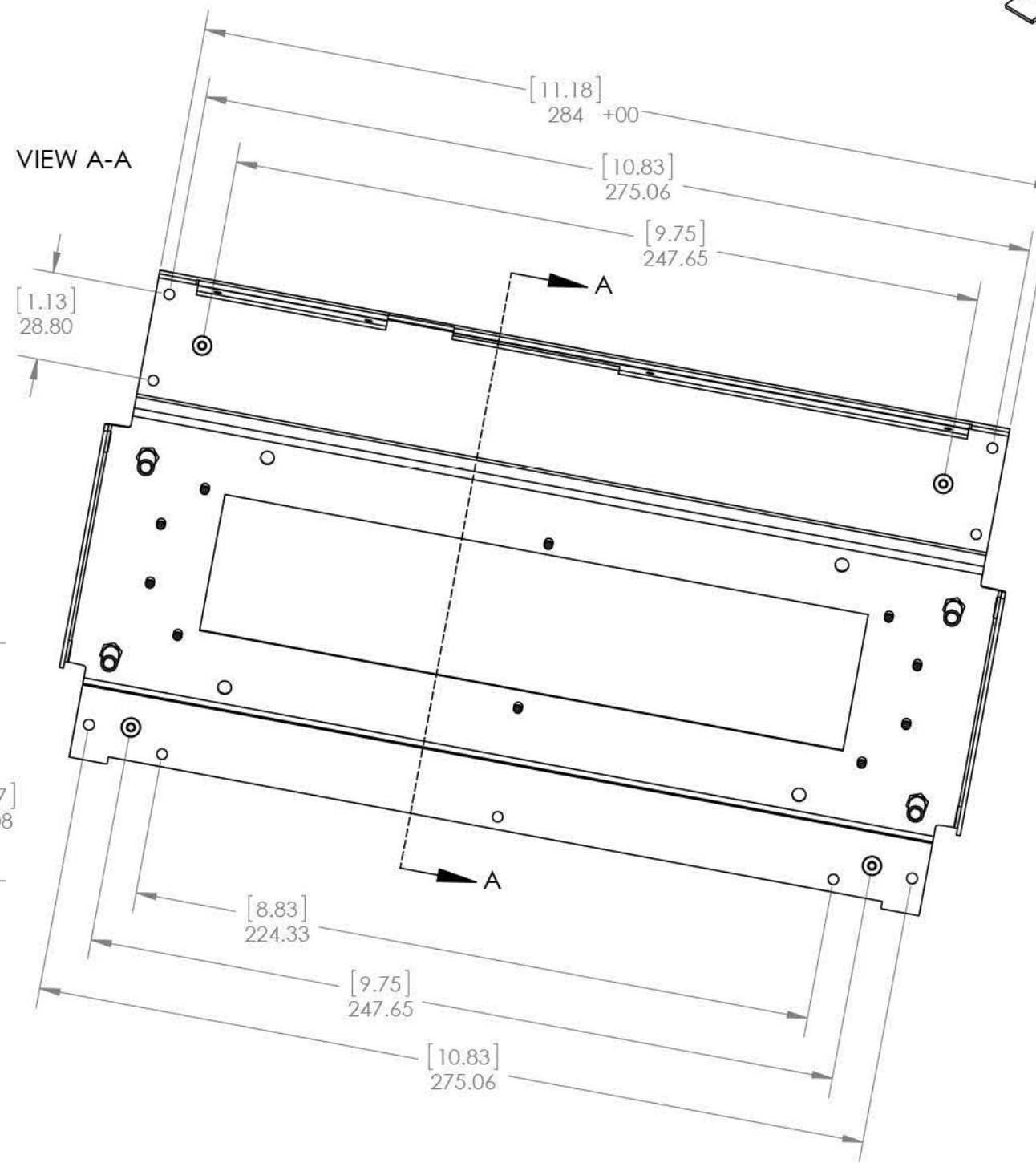
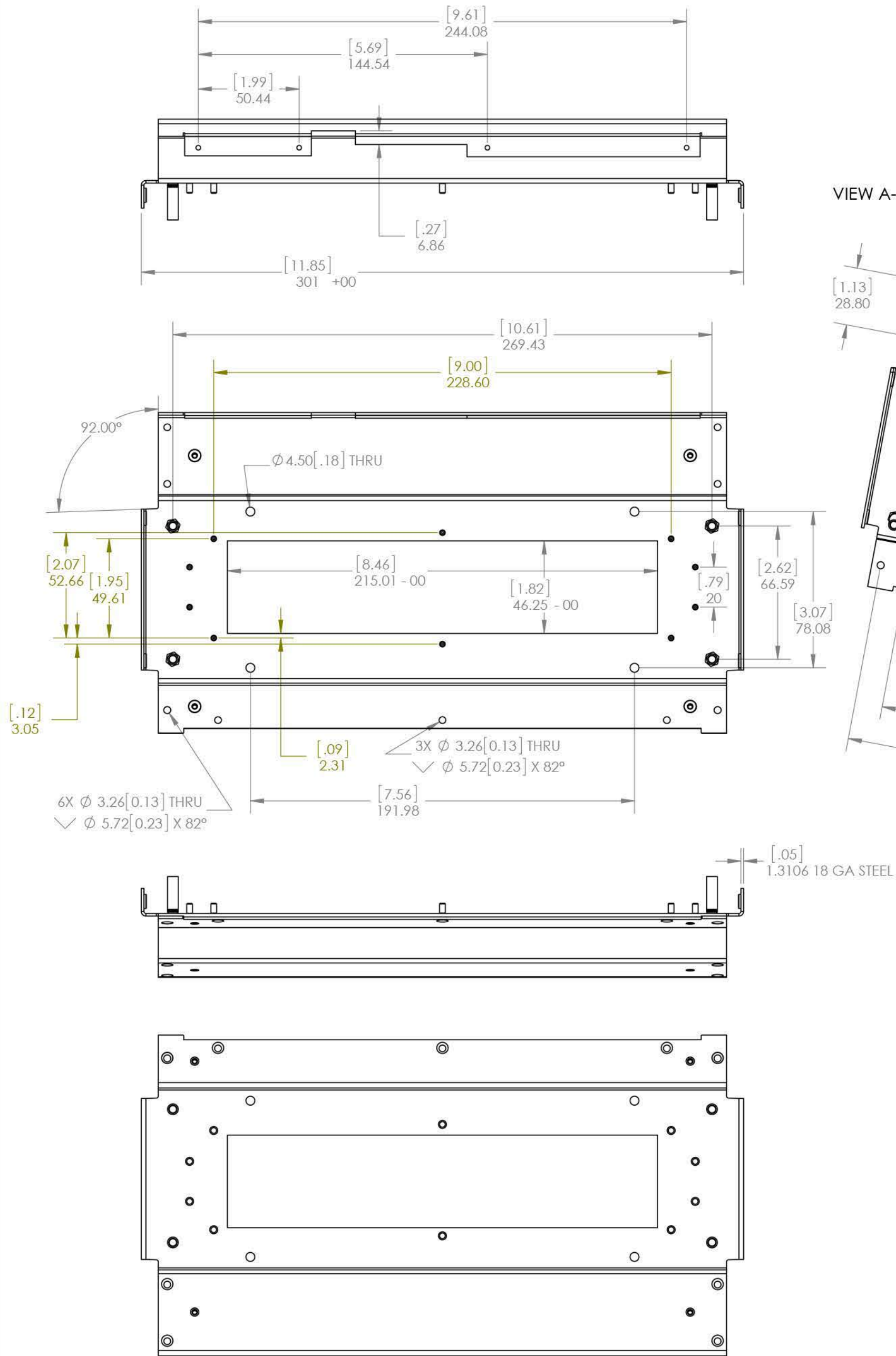
ITEM NO.	PART NUMBER	QTY.
1	SM-MP-102 (BOTTOM PANEL)	1
2	PENN UNTHREADED STANDOFF CLEARS 6-32 X .75IN SOS-6143-24	4
3	PENN 6-32 SELF CLINCHING NUT CLS-632-0	4
4	PENN 4-40 X .25IN SELF CLINCHING STUD FHS-440-4	10
5	PENN 4-40 SELF CLINCHING NUT CLS-440-0	4

NOTES: UNLESS OTHERWISE SPECIFIED (OVERRIDES TITLE BLOCK)

1. MATERIAL: CR SHEET STEEL
2. THICKNESS: 0.052" (18 GA STEEL)
3. Inside Bend RAD = THICKNESS EXCEPT AS NOTED
4. All Cartesian dimensions, and dimensions originating from centerline are typical to the opposing features.
5. TOLERANCES: Linear +/- 0.015. Positional +/- 0.015". Diametral +/- 0.005". Angular +/- 0.25 degrees.
6. All dimensions are pre-finish.
7. Interpret drawing per ANSI y14.5-1982.
8. Dimensions are critical. All other features are arbitrary.

FINISHING:

1. Remove all sharp edges to .01" MAX.
2. Appearance surfaces to be free of cosmetic flaws including, but not limited to: extrusion lines, scratches, dents, tool marks, racking marks.
3. PRE-FINISHING: None.
4. MASKING: None.
5. RACKING: None.
6. FINISHING: None.
7. Package to protect during shipping, storage and handling.



07.15.2017

TITLE SM-MP-102 (BOTTOM PANEL) 2		INTERNAL PART NUMBER	REVISION A	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:2	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	SHEET SIZE DO NOT SCALE DRAWING		
<p>TOLERANCES AND FINISHES UNLESS STATED OTHERWISE:</p> <p>LINEAR: x.xxx = +/- 0.005 x.xx = +/- 0.01 x.x = +/- 0.05 x = +/- 0.1</p> <p>RADI: = .5X LINEAR</p> <p>ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg</p> <p>FRACT: AS CAST, AS MACHINED 010' MAX FINISH: BREAK ALL SHARP CORNERS</p>				
		<p>SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com</p>		

4

3

2

1

D

D

C

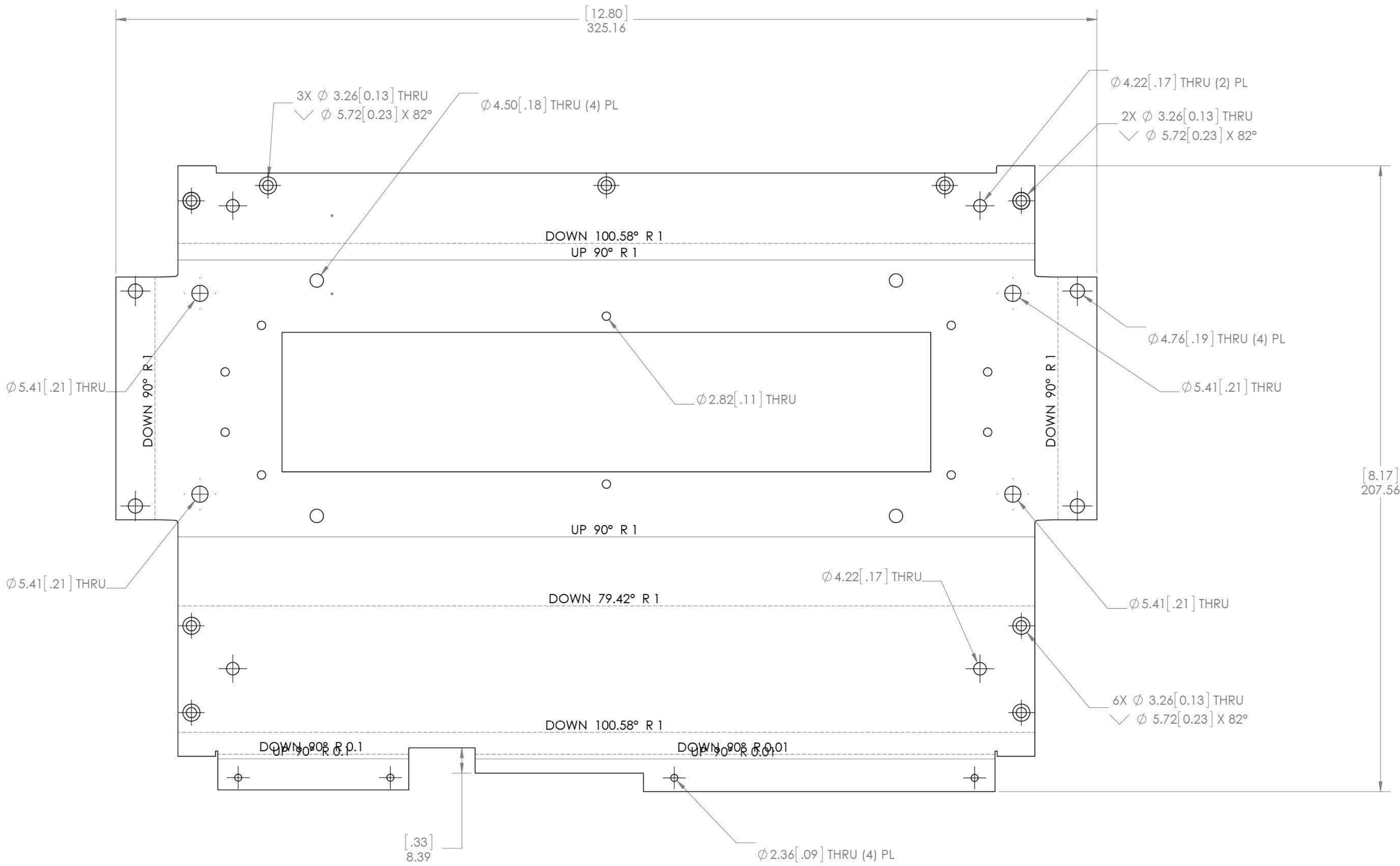
C

B

B

A

A



07.15.2017

TITLE SM-MP-102 (BOTTOM PANEL) 3		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	DO NOT SCALE DRAWING		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: xxx = +/- 0.005 xx = +/- 0.01 x = +/- 0.05 = +/- 0.1 RADI: = .5X LINEAR ANGULAR: xx = +/- 0.05 deg x = +/- 0.1 deg = +/- 0.5 deg		FRACT: AS CAST, AS MACHINED 010' MAX FINISH: BREAK ALL SHARP CORNERS		
		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		

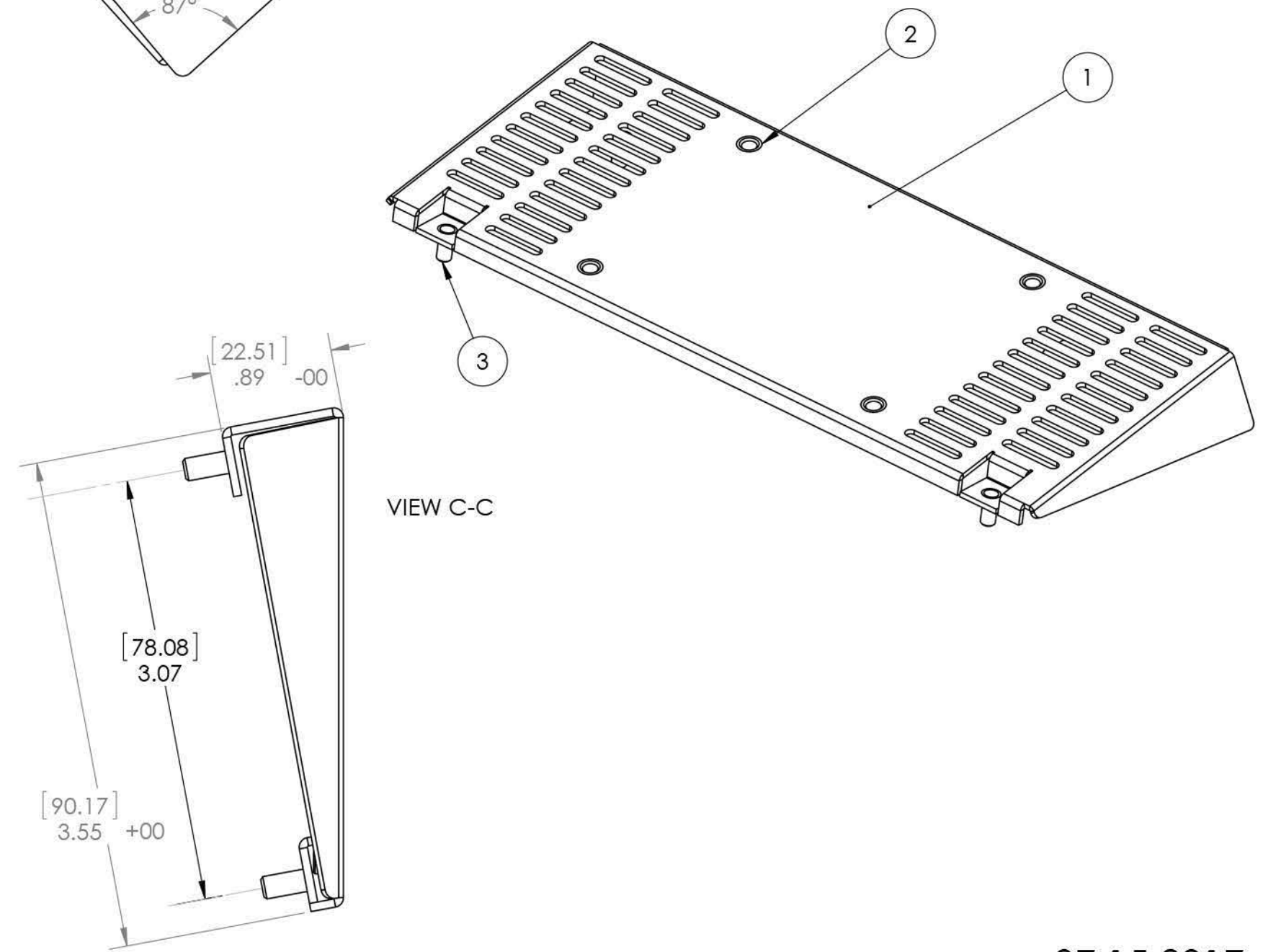
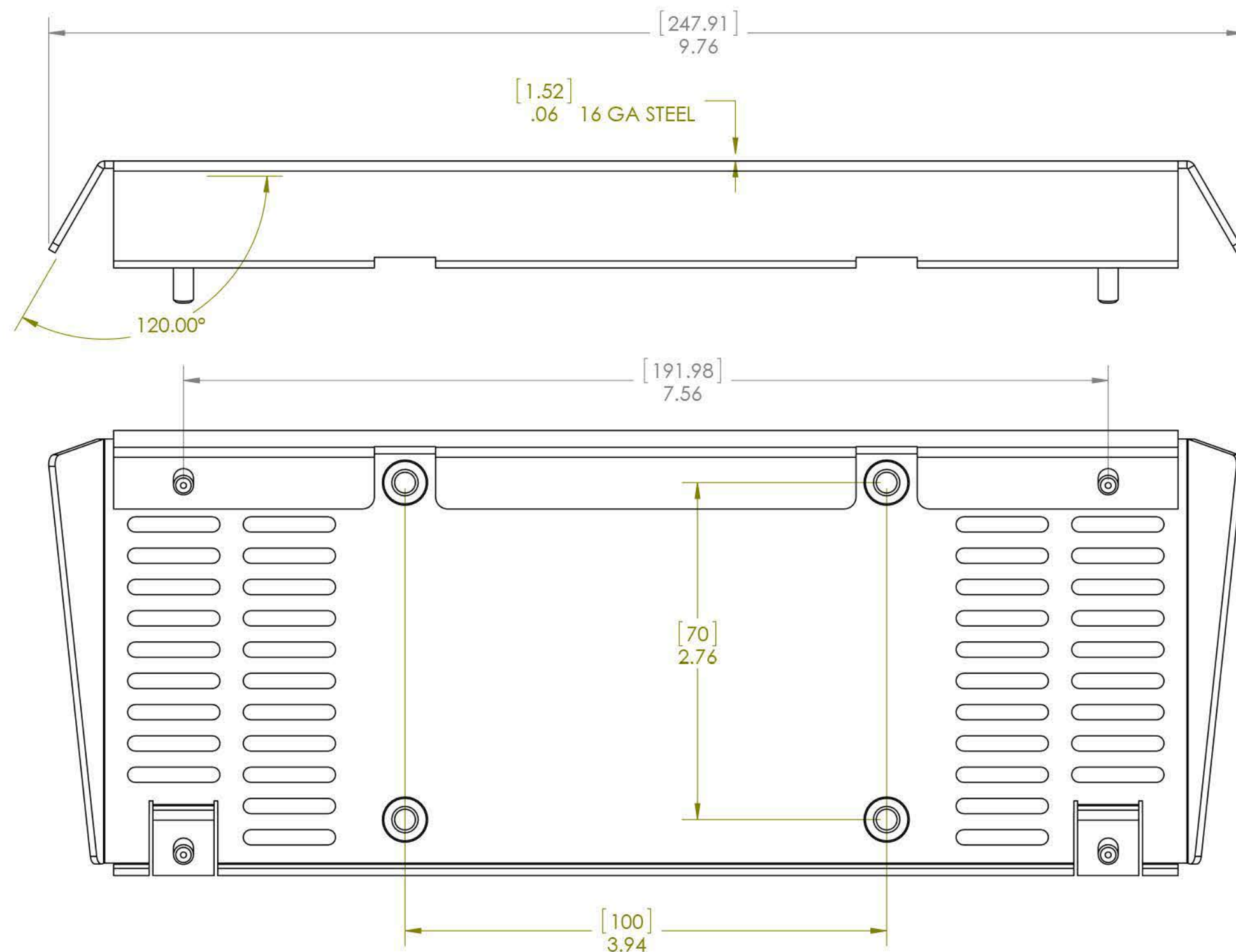
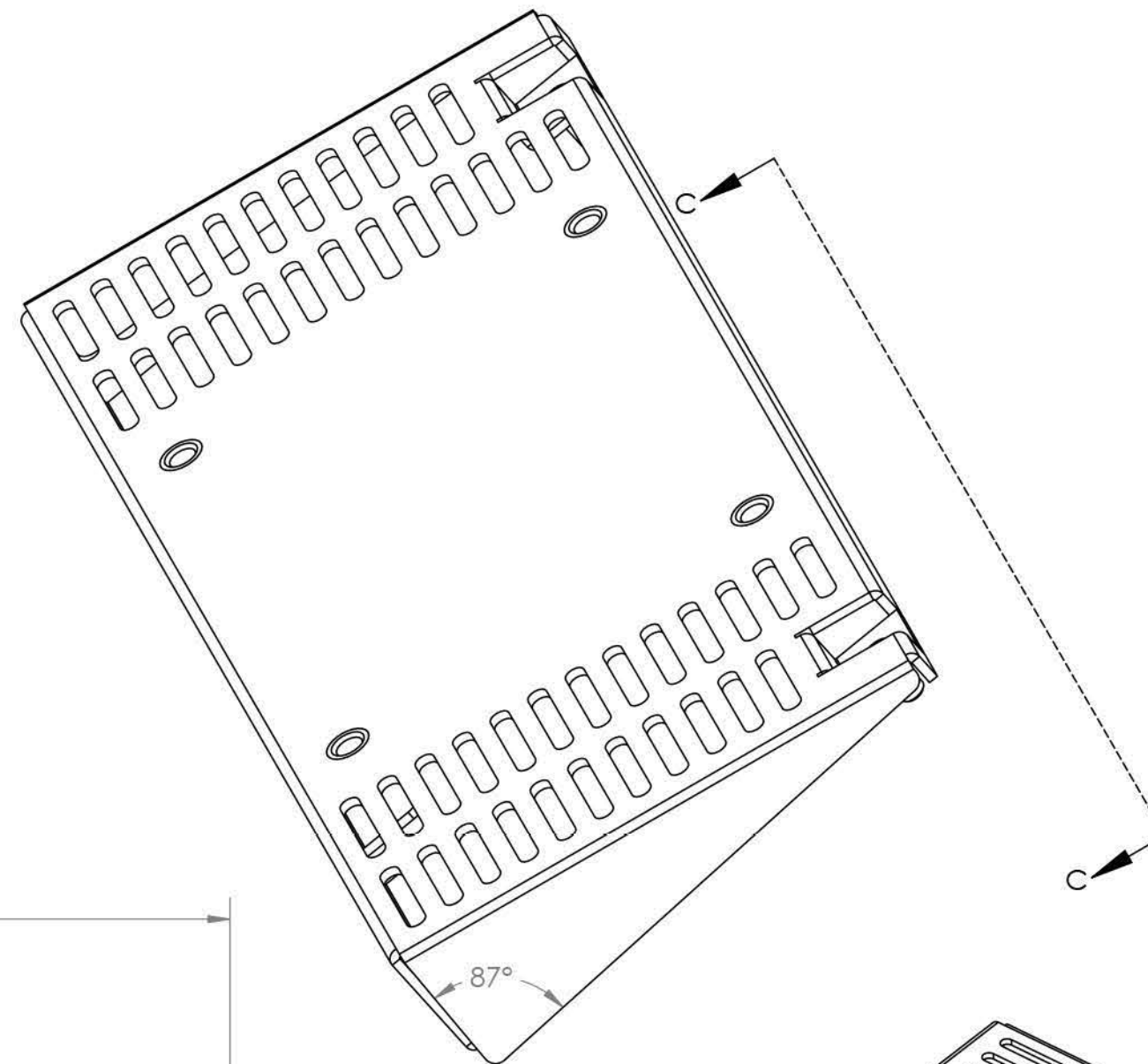
4

3

2

1

ITEM NO.	PART NUMBER	QTY.
1	SM-MP-104C (MOUNT ADAPTOR PLATE)	1
2	PENN 12-24 SELF CLINCHING NUT CLS-1224-3	4
3	PENN 8-32 X .375IN SELF CLINCHING STUD FHS-832-6	4



07.15.2017

NOTES: UNLESS OTHERWISE SPECIFIED (OVERRIDES TITLE BLOCK)

- MATERIAL: CR SHEET STEEL
- THICKNESS: 0.0598" (18 GA STEEL)
- Inside Bend RAD = THICKNESS EXCEPT AS NOTED
- All Cartesian dimensions, and dimensions originating from centerline are typical to the opposing features.
- TOLERANCES: Linear +/- 0.015, Positional +/- 0.015". Diametral +/- 0.005". Angular +/- 0.25 degrees.
- All dimensions are pre-finish.
- Interpret drawing per ANSI y14.5-1982.
- Dimensions are critical. All other features are arbitrary.

FINISHING:

- Remove all sharp edges to .01" MAX.
- Appearance surfaces to be free of cosmetic flaws including, but not limited to: extrusion lines, scratches, dents, tool marks, racking marks.
- PRE-FINISHING: None.
- MASKING: None.
- RACKING: None.
- FINISHING: None.
- Package to protect during shipping, storage and handling.

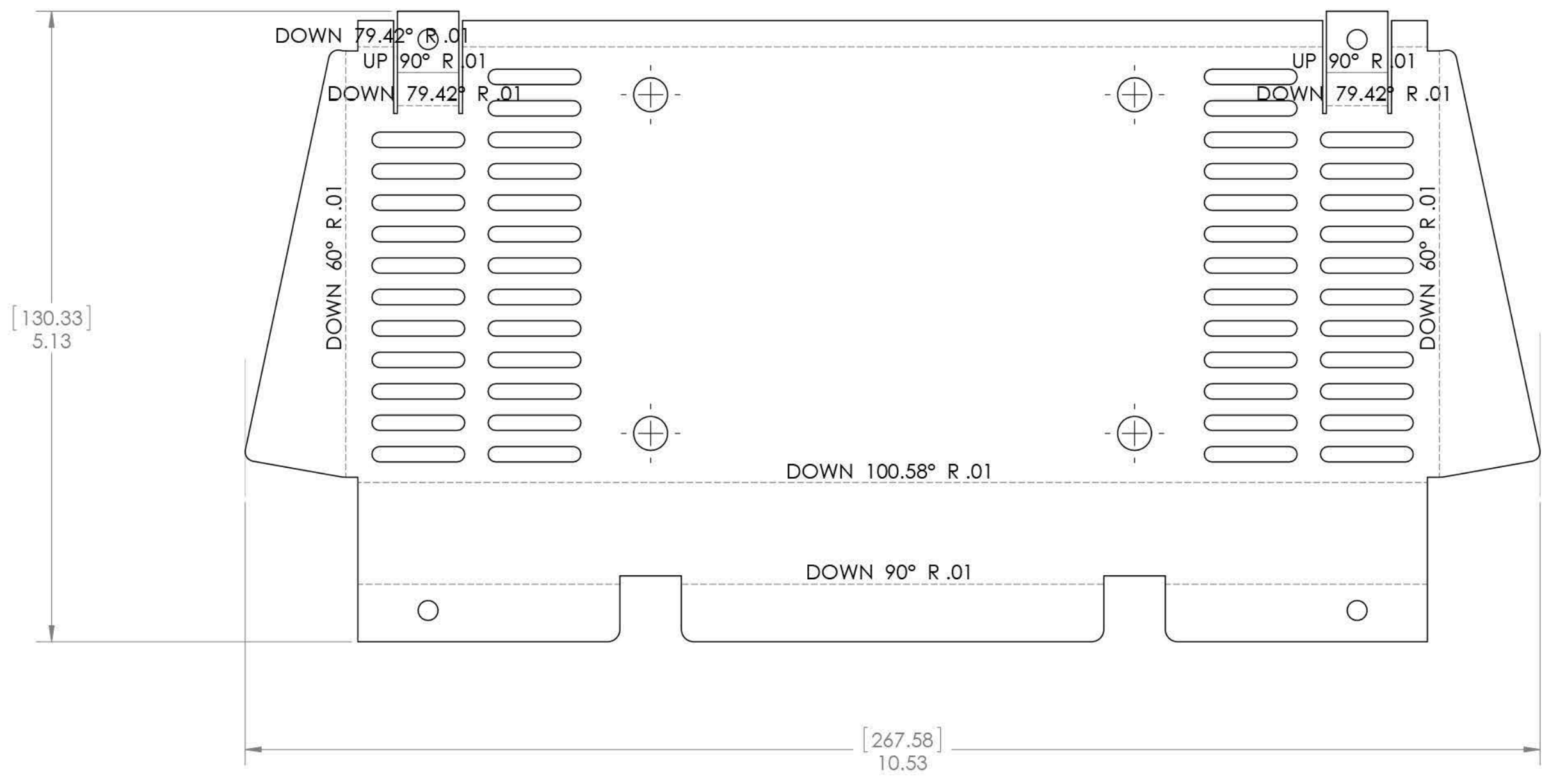
TITLE SM-MP-104C (MOUNT ADAPTOR PLATE)		INTERNAL PART NUMBER	REVISION	QTY REQ'd
DESCRIPTION		MASS	N/A	VOLUME
PROJECT	MIMIC CONTROLLER	CLIENT	Steven Slate	MATERIAL
DRAWING NAME		CREATION DATE	09/17/2016	DRAWN BY
VENDOR	Various	VENDOR STOCK NUMBER	N/A	R. Spindel
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE:		SCALE	SCALE: 1:1	SHEET COUNT
LINEAR:	xx.xx = +/- 0.005 xx.xx = +/- 0.01 xx = +/- 0.005 x = +/- 0.1	FRACT:	AS CAST, AS MACHINED 010' MAX	SHEET SIZE
RADI:	= .5X LINEAR	FINISH:	BREAK ALL SHARP CORNERS	SHEET 1 OF 1
ANGULAR	xx = +/- 0.05 deg xx = +/- 0.1 deg x = +/- 0.5 deg	DO NOT SCALE DRAWING		
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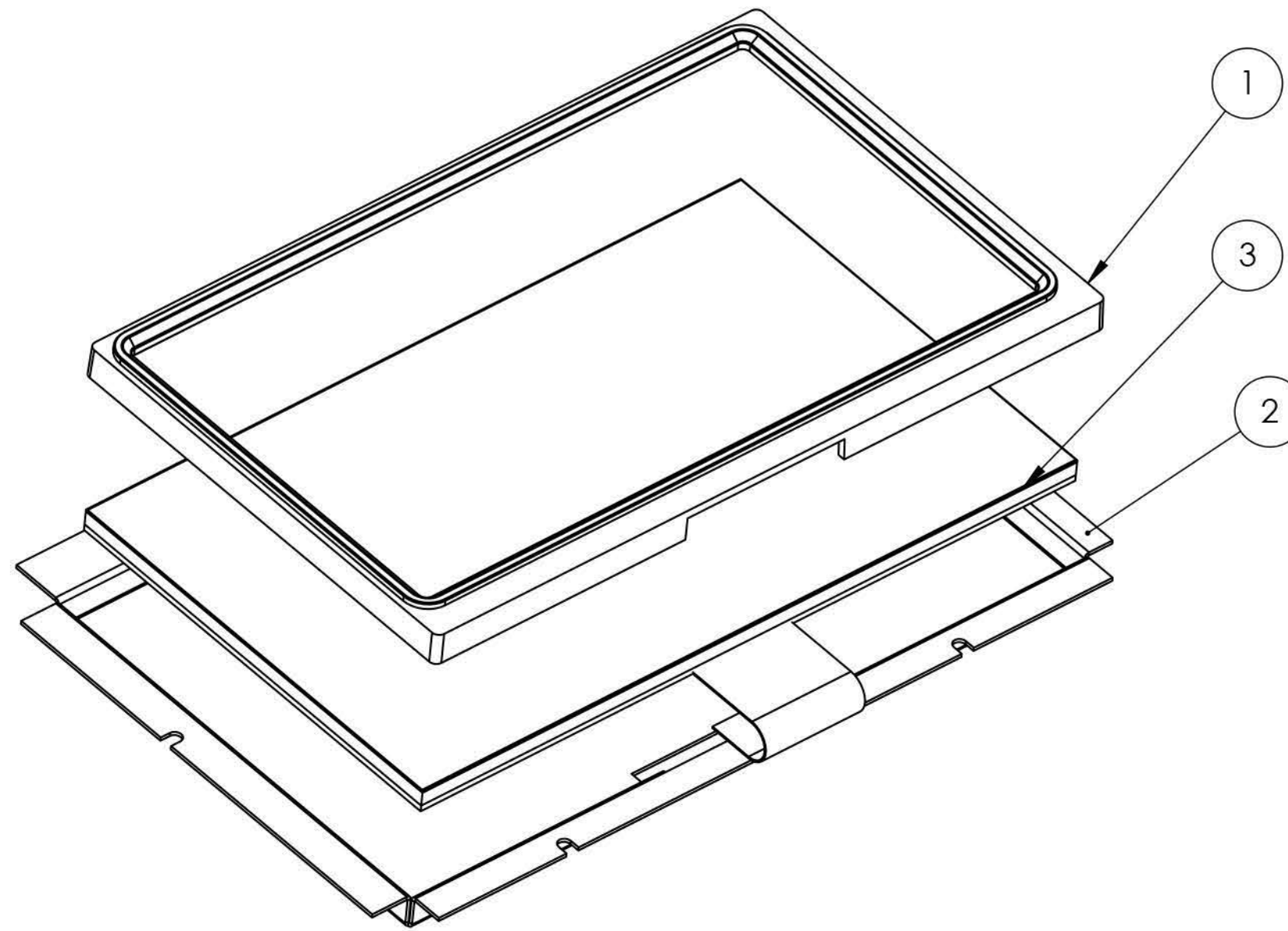


07.15.2017

TITLE SM-MP-104C (MOUNT ADAPTOR PLATE) 2		INTERNAL PART NUMBER		REVISION 1	QTY REQ'd 1
DESCRIPTION		MASS N/A		VOLUME	
PROJECT MIMIC CONTROLLER		CLIENT Steven Slate		MATERIAL	
DRAWING NAME		CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various		VENDOR STOCK NUMBER N/A		SHEET SIZE DO NOT SCALE DRAWING	
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: xxx = +/- 0.005 FRACT. xx = +/- 0.01 AS CAST, AS MACHINED 010' MAX x = +/- 0.05 FINISH: BREAK ALL SHARP CORNERS = .5X LINEAR RADE: xx = +/- 0.05 deg ANGULAR: x = +/- 0.1 deg x = +/- 0.5 deg					
				SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com	

ITEM NO.	PART NUMBER	QTY.
1	SM-PP-103 (DISPLAY BEZEL)	1
2	SM-MP-103 (DISPLAY SUPPORT PLATE)	1
3	TOUCHSCREEN	1

(SHOWN FOR REF)



07.15.2017

TITLE SM-SA-102 (DISPLAY MODULE ASSEMBLY)		INTERNAL PART NUMBER	REVISION	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	DO NOT SCALE DRAWING		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: x.xxx = +/- 0.005 FRACT: AS CAST, AS MACHINED .010" MAX x.xx = +/- 0.01 AS CAST, AS MACHINED .010" MAX x.x = +/- 0.05 FINISH: BREAK ALL SHARP CORNERS x = +/- 0.1 RADII: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		

NOTE: UNLESS OTHERWISE SPECIFIED:

1. This drawing is based on a solid model with part/assembly number and name matching this drawing.
2. This drawing is for reference only: dimensions show are nominal and not to be followed. For specific details please refer to the part files.

MATERIAL:

3. Resin must be a high temperature blend of polycarbonate (PC) and acrylnitrile-butadiene-styrene (ABS).
4. No regrind resin may be used. Material must be free of any contaminants.
5. Flame Rating UL 94V-0
6. UV Resistance
7. All Material RoHS compliant

SURFACE FINISH:

8. Exterior surface finish WHERE NOTED : SPI A-1 Optical Quality High Polish Parts
9. Interior surfaces and all other surfaces except where noted SPI C-1 to C-3 (Medium Polish)
10. All visible surfaces to be free of all flash, sinkmarks, blemishes, scratches and other defects such as bubbles, splay, burns, gas marks, marbling, orange peel, pitting, cracking, crazing, delamination or cold slugs.

COLOR:

11. Black

TOLERANCES:

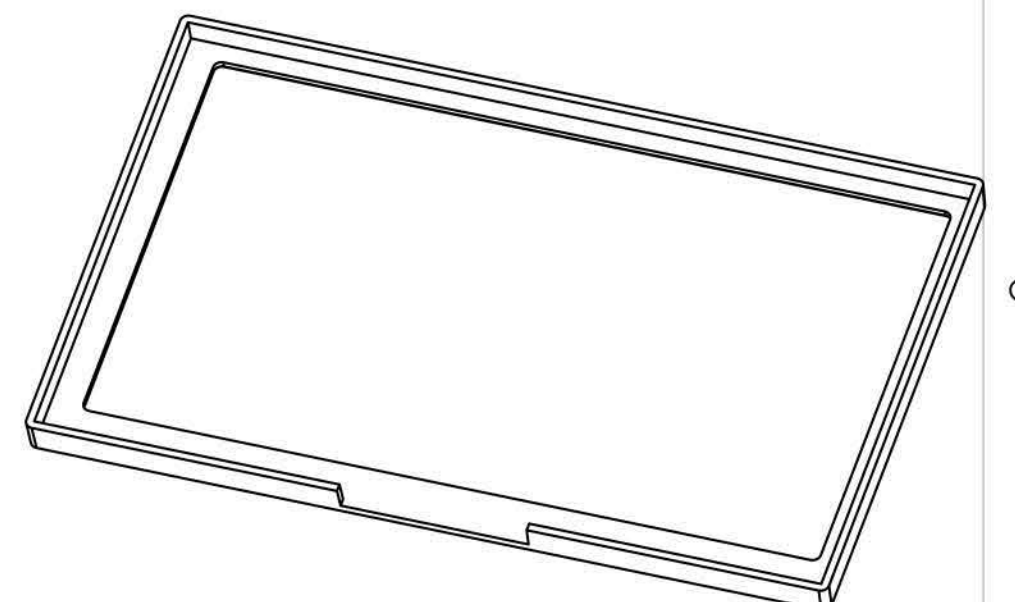
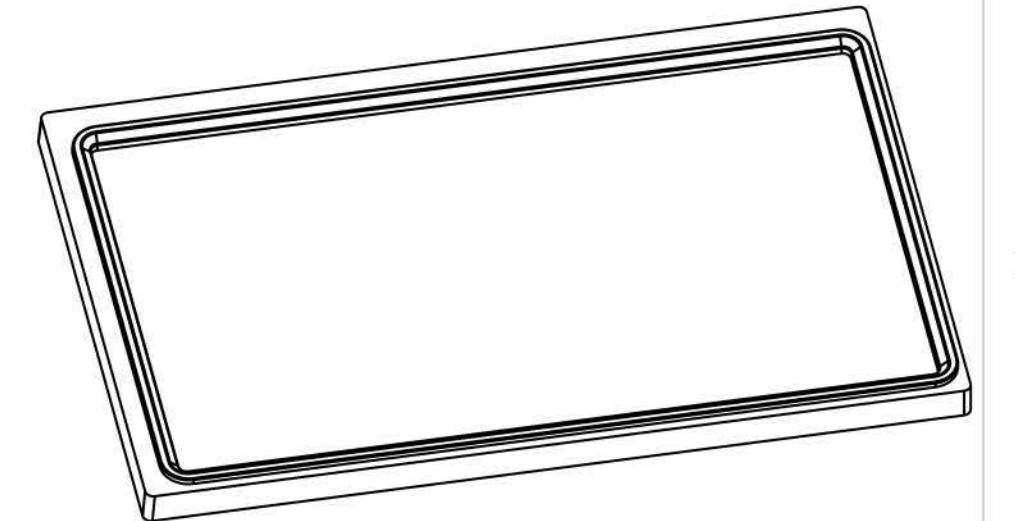
12. Warpage will not exceed Star's standard spec 0.38mm/0-100mm and .8mm/101-160mm). Please note this is the equivalent of .0038mm/mm and .008mm/mm, respectively.
13. Shrink will not exceed Star's standard spec of +/- .405mm over 168mm part length (largest dimension no part), see Star's standards for smaller tolerances on smaller dimensions. Please note that +/- .405/170mm is the equivalent of +/- .002mm/mm.

DRAFT:

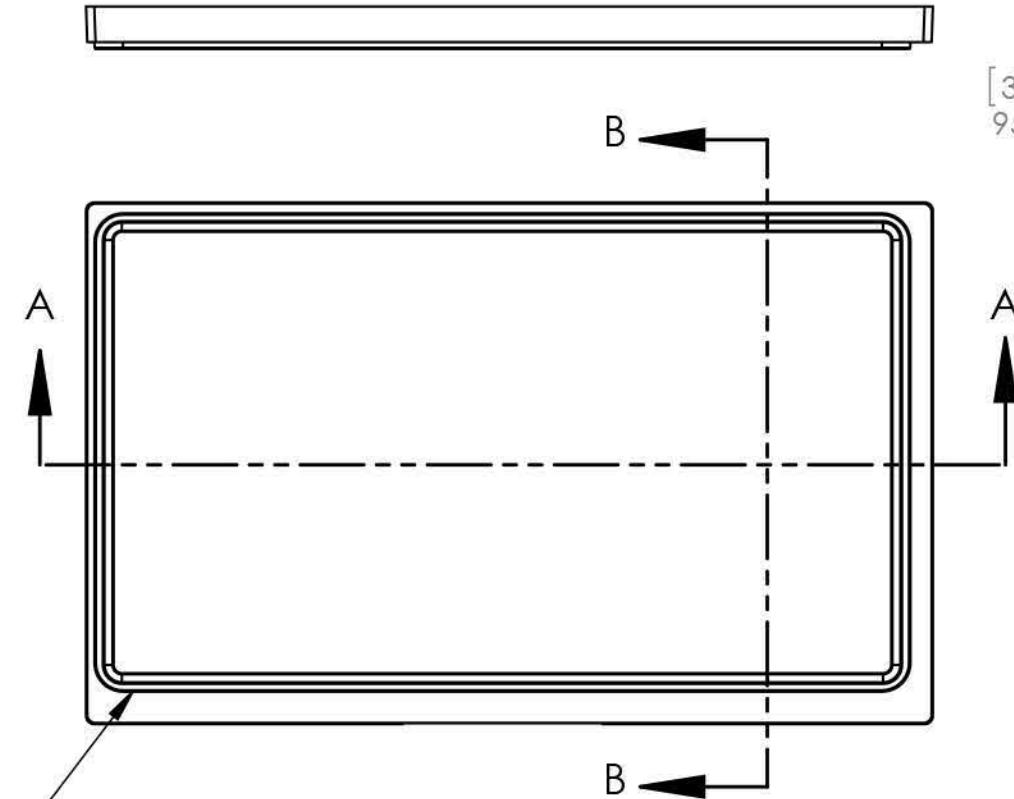
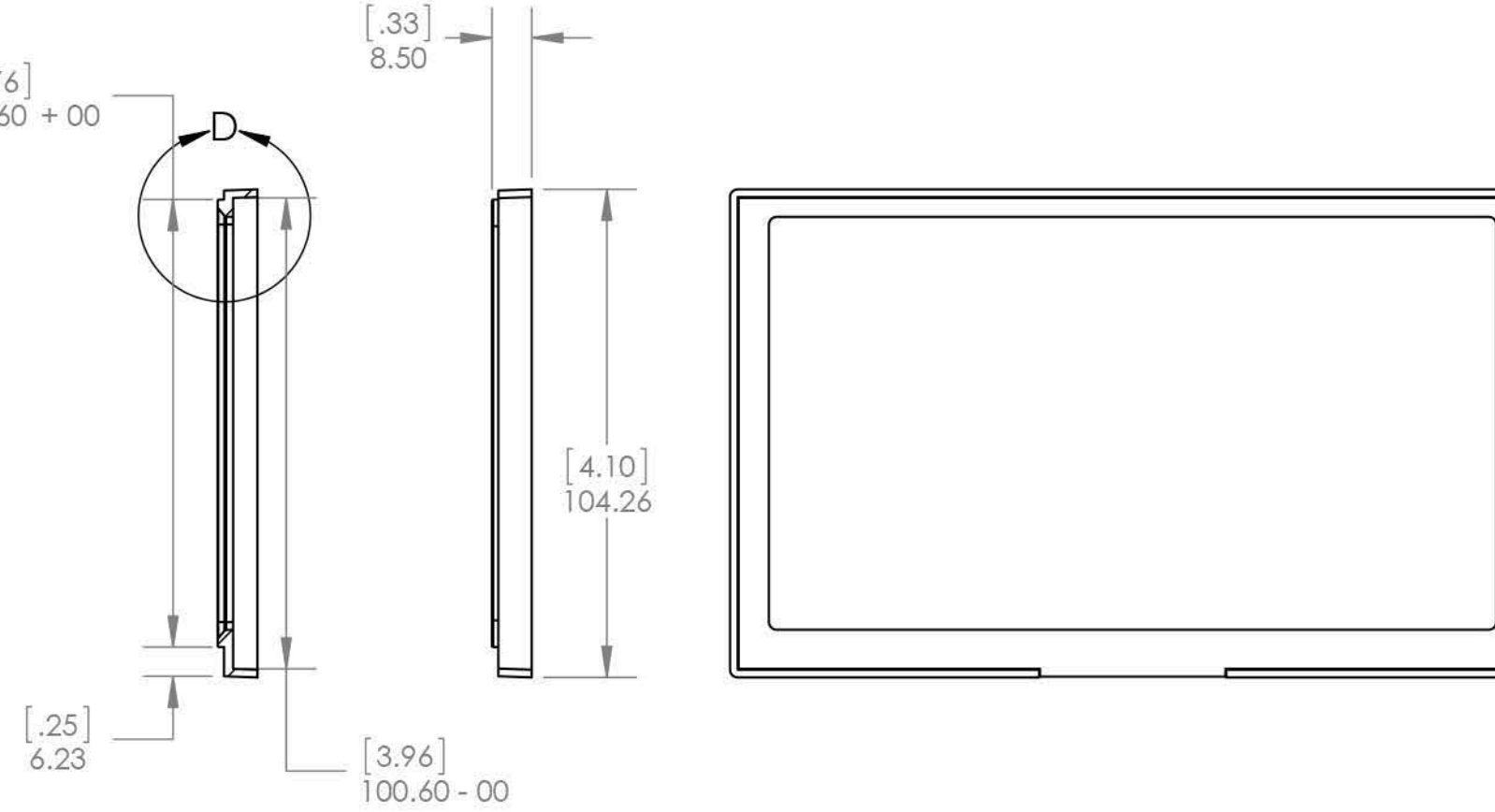
14. Refer to 3D model. Minimum exterior draft on visible faces +/- 1°. Interior faces vary as needed 0.5-1°.

EJECTOR AND GATES, CUT TOLERANCES:

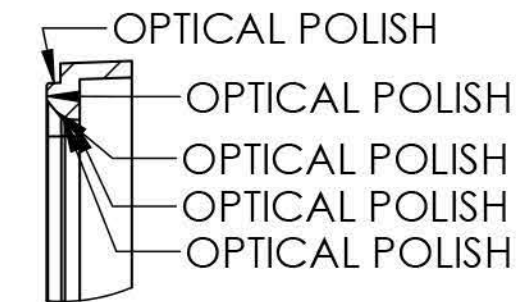
15. All ejector pin and gate marks to be in fully hidden locations on interior surfaces only. All such marks and locations to be approved by Yellow Matter Entertainment prior to production. "Interior surfaces" does not include any surfaces that can be seen from the exterior of the product when rotated in any direction, from below, above or to the sides.
16. Trim from cut ejector and gate lines can be no taller than .005" from surface.



**SECTION B-B
SCALE 1 : 2**

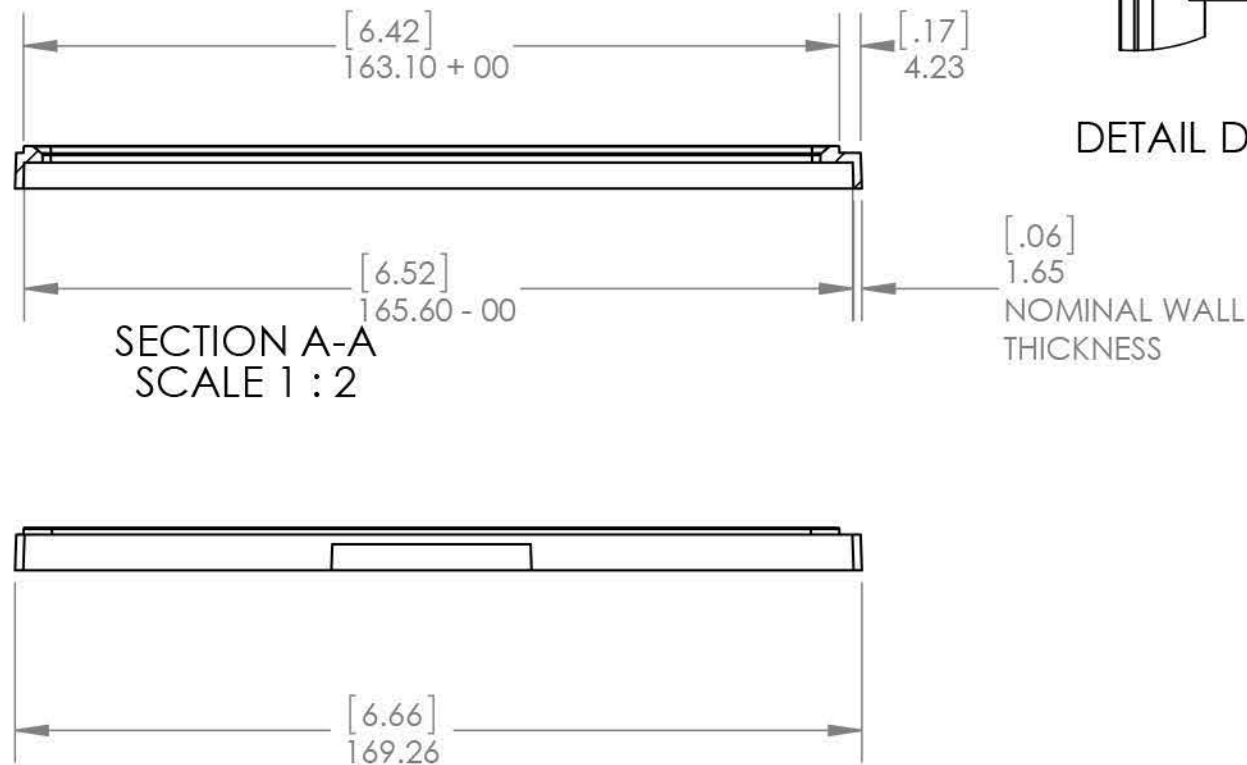


OPTICAL POLISH REQUIRED ON SURFACES INSIDE OF THIS LINE. ALL OTHER SURFACES CAN BE SPI-C1-C3



DETAIL D

**SECTION A-A
SCALE 1 : 2**



07.15.2017

TITLE SM-PP-103 (DISPLAY BEZEL)		INTERNAL PART NUMBER	REVISION	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME	N/A
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	SHEET SIZE DO NOT SCALE DRAWING		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE: LINEAR: .xxx = +/- 0.005 .xx = +/- 0.01 .x = +/- 0.05 x = +/- 0.1 RADI: = .5X LINEAR ANGULAR: .xxx = +/- 0.05 deg .xx = +/- 0.1 deg x = +/- 0.5 deg FRACT: AS CAST, AS MACHINED .010" MAX FINISH: BREAK ALL SHARP CORNERS		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		

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NOTE: UNLESS OTHERWISE SPECIFIED:
 1. This drawing is based on a solid model with part/assembly number and name matching this drawing.
 2. This drawing is for reference only; dimensions shown are nominal and not to be followed. For specific details please refer to the part files.

MATERIAL:
 3. Resin must be a high temperature blend of polycarbonate (PC) and acrylonitrile-butadiene-styrene (ABS).
 4. No regrind resin may be used. Material must be free of any contaminants.
 5. Flame Rating UL 94V-0
 6. UV Resistance
 7. All Material RoHS compliant

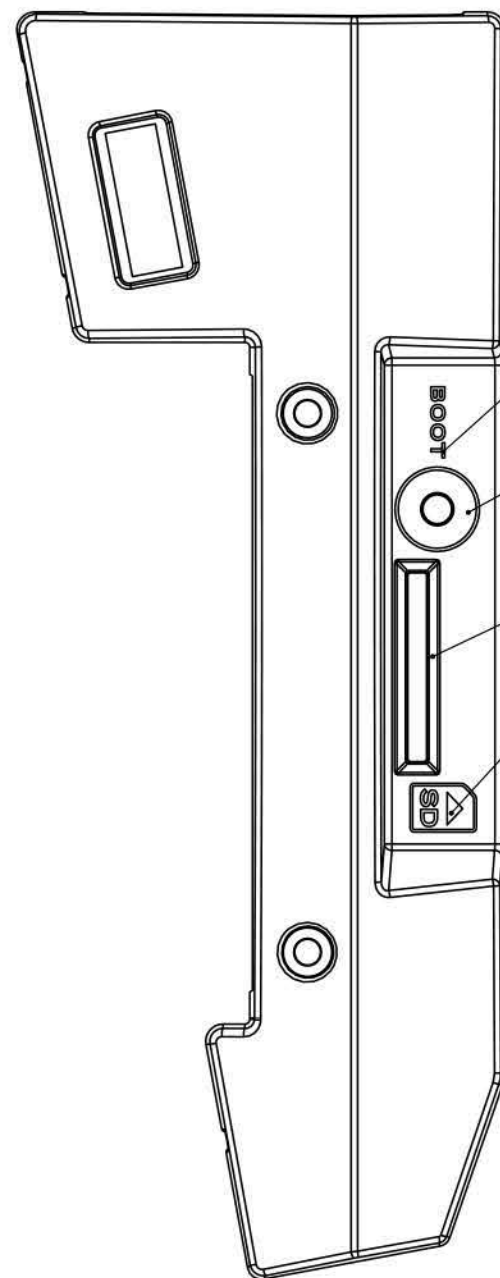
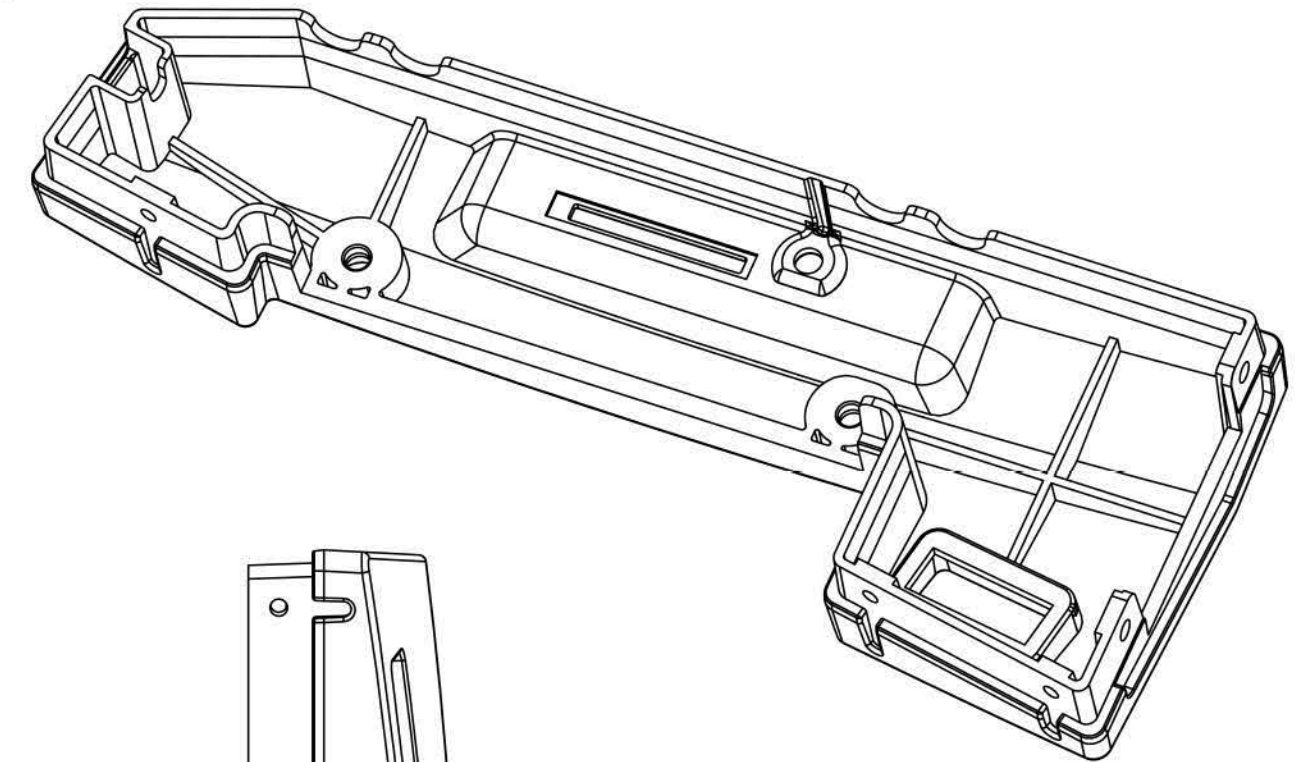
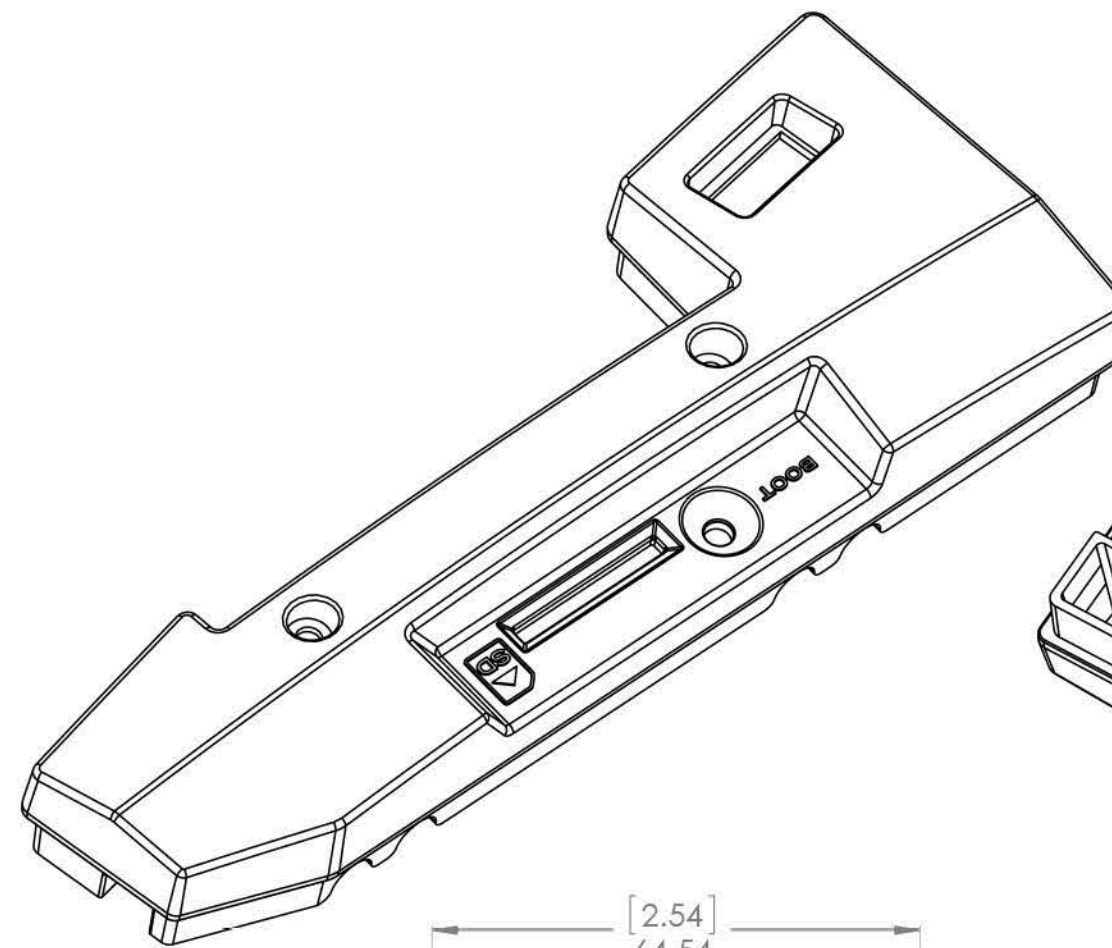
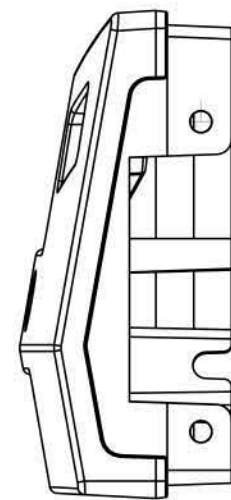
SURFACE FINISH:
 8. Exterior surface finish: MoldTech MT-11020 or equiv EXCEPT WHERE INDICATED
 9. Interior surfaces SPI B-2 (Medium Polish)
 10. All visible surfaces to be free of all flash, sinkmarks, blemishes, scratches and other defects such as bubbles, splay, burns, gas marks, marbling, orange peel, pitting, cracking, crazing, delamination or cold slugs.

COLOR:
 11. Black

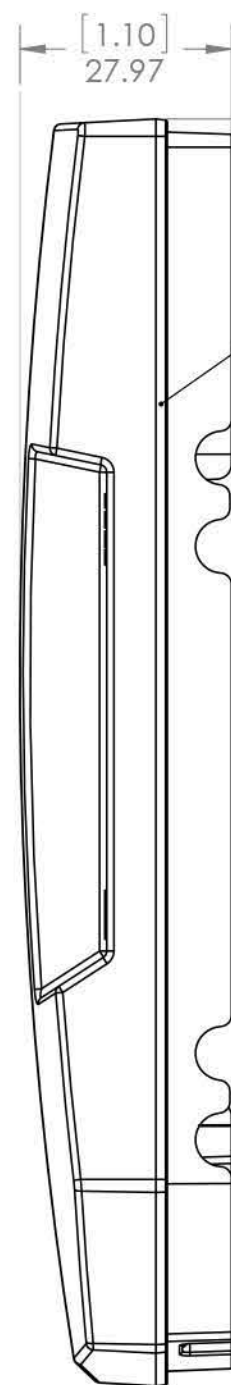
TOLERANCES:
 12. Warpage will not exceed Star's standard spec 0.38mm/0-100mm and .8mm/101-160mm). Please note this is the equivalent of .0038mm/mm and .008mm/mm, respectively.
 13. Shrink will not exceed Star's standard spec of +/- .405mm over 168mm part length (largest dimension no part), see Star's standards for smaller tolerances on smaller dimensions. Please note that +/- .405/170mm is the equivalent of +/- .002mm/mm.

DRAFT:
 14. Refer to 3D model. Minimum exterior draft on visible faces +/- 1°. Interior faces vary as needed 0.5-1°.

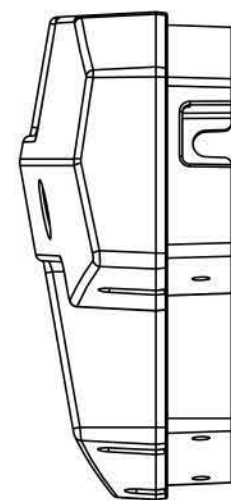
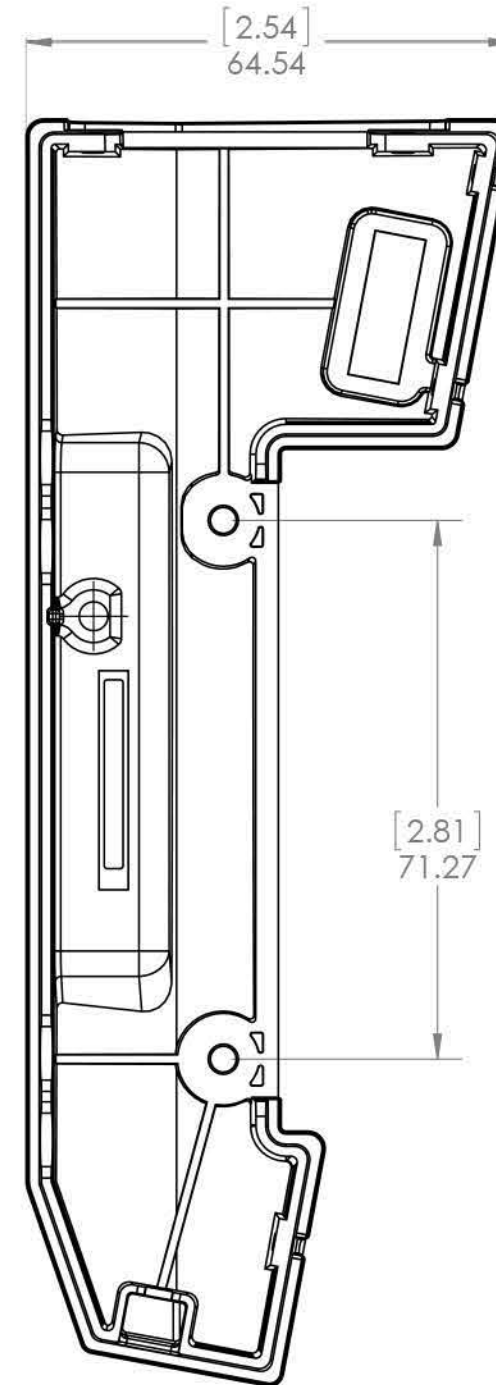
EJECTOR AND GATES, CUT TOLERANCES:
 15. All ejector pin and gate marks to be in fully hidden locations on interior surfaces only. All such marks and locations to be approved by Yellow Matter Entertainment prior to production. "Interior surfaces" does not include any surfaces that can be seen from the exterior of the product when rotated in any direction, from below, above or to the sides.
 16. Trim from cut ejector and gate lines can be no taller than .005" from surface.



RAISED WORD "BOOT"
 TEXTURE = SPI-B2
 THIS AREA AROUND THRU
 HOLE TEXTURE = SPI-B2
 CHAMFERED OPENING FOR
 SLOT TEXTURE = SPI-B2
 RAISED SD CARD LOGO
 TEXTURE = SPI-AB2



SLIGHT CHAMFER
 ALL AROUND PART
 TEXTURE - SPI-B2



07.15.2017

TITLE SM-PP-101 (LEFT END CAP)		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	SHEET SIZE DO NOT SCALE DRAWING		

TOLERANCES AND FINISHES UNLESS STATED OTHERWISE:
 LINEAR: .xxx = +/- 0.005
 .xx = +/- 0.01
 .x = +/- 0.05
 = +/- 0.1
 = .5X LINEAR
 ANGULAR: .xx = +/- 0.05 deg
 .x = +/- 0.1 deg
 = +/- 0.5 deg

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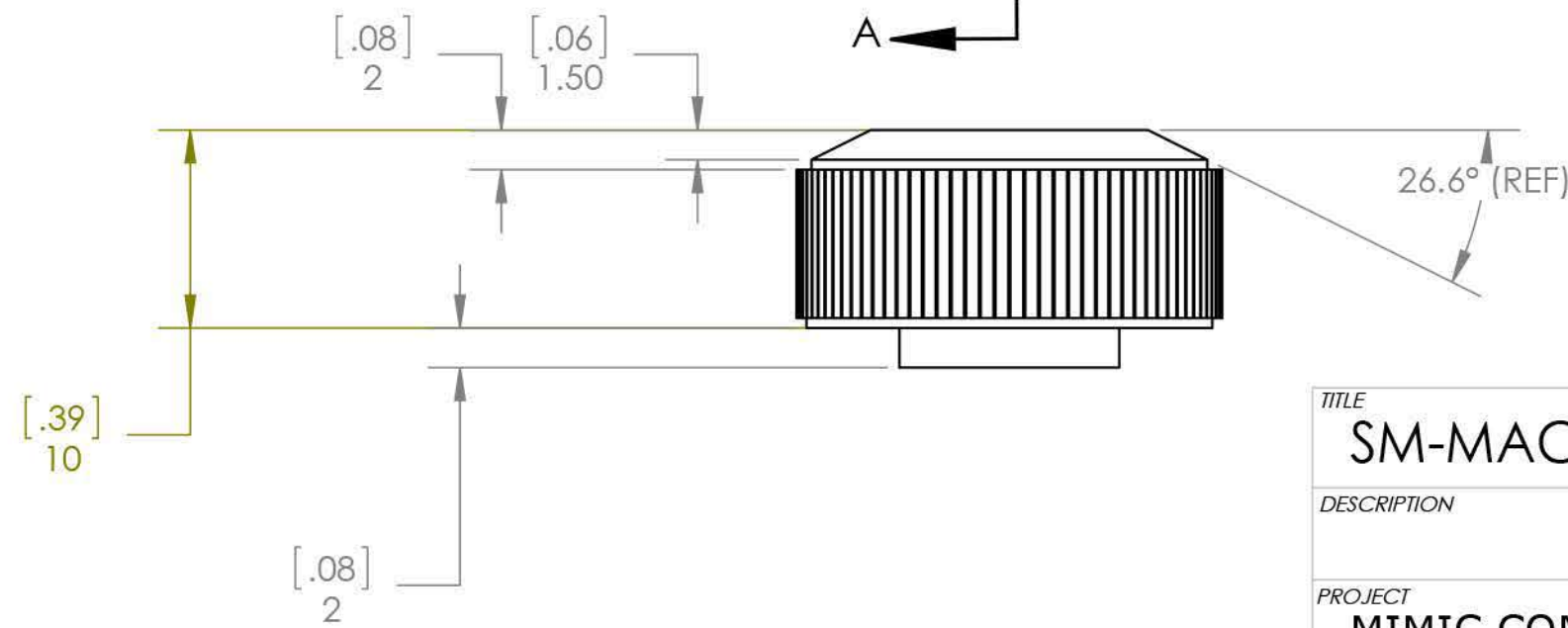
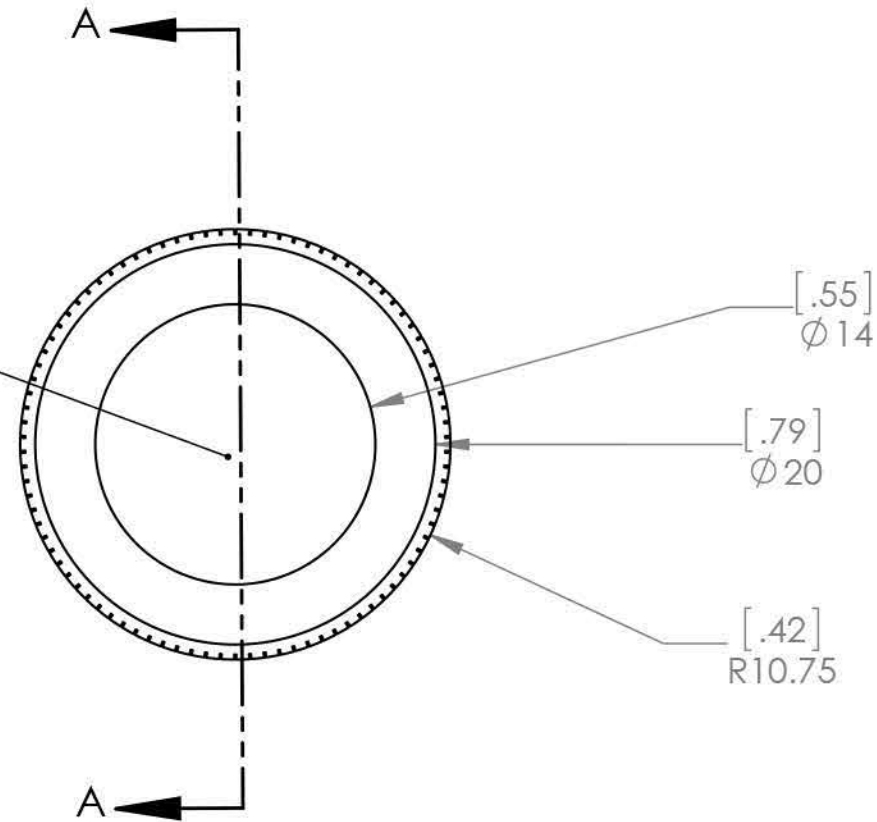
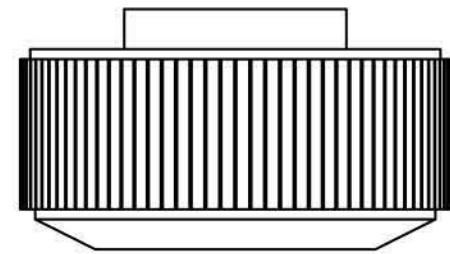
NOTES: UNLESS OTHERWISE SPECIFIED (OVERRIDES TITLE BLOCK)

1. MATERIAL: 6063 ALUMINUM
2. THICKNESS: 0.40 MAX
3. All Cartesian dimensions, and dimensions originating from centerline are typical to the opposing features.
4. TOLERANCES: Linear +/- 0.015. Positional +/- 0.015". Diametral +/- 0.005". Angular +/- 0.25 degrees.
5. All dimensions are pre-finish.
6. Interpret drawing per ANSI y14.5-1982.
7. Dimensions are critical. All other features are arbitrary.

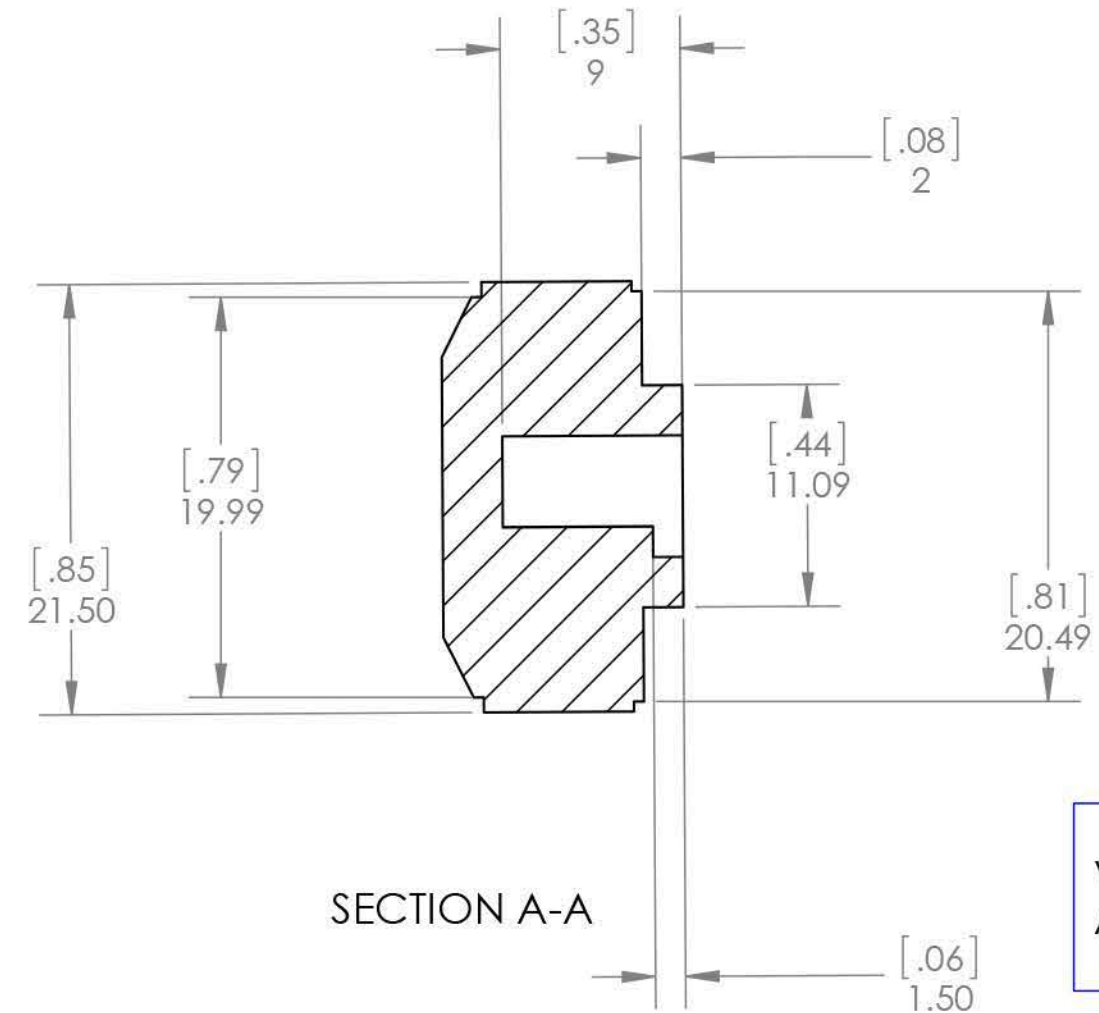
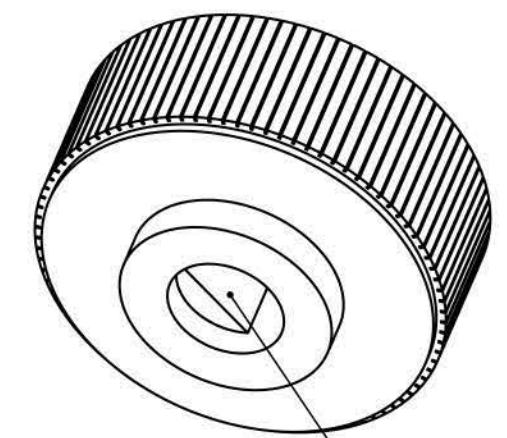
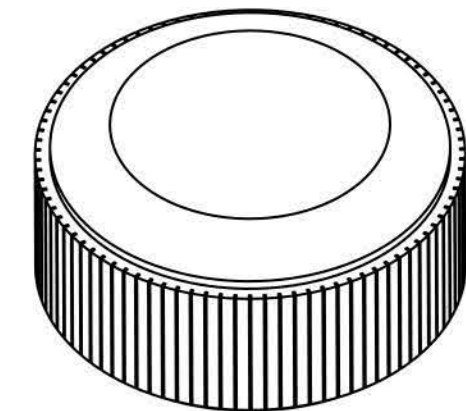
FINISHING:

1. Remove all sharp edges to .01" MAX.
2. Light sandblast outer
3. Black anodize with satin clearcoat..
4. MASKING: None.
5. RACKING: None.
6. FINISHING: BLACK ANODIZE AND PROTECTIVE CLEARCOAT
7. Package to protect during shipping, storage and handling.

APPLY ROTARY BRUSH PATTERN TO TOP SURFACE LIKE SLATE VMS ONE



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



VENDOR TO EVALUATE ENCODER AND SUGGEST IDEAL FIT

VENDOR NOTE WELL!!!!

07.15.2017

TITLE SM-MACHP-101 21.5MM DIA 8MM METAL KNOB		INTERNAL PART NUMBER	REVISION B	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME N/A	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 2:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	SHEET SIZE B		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE:		DO NOT SCALE DRAWING		
LINEAR: xxx = +/- 0.005 FRACT: AS CAST, AS MACHINED .010" MAX xx = +/- 0.01 FINISH: BREAK ALL SHARP CORNERS x = +/- 0.05 x = +/- 0.1 RADII: = .5X LINEAR ANGULAR: xxx = +/- 0.05 deg xx = +/- 0.1 deg x = +/- 0.5 deg		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		

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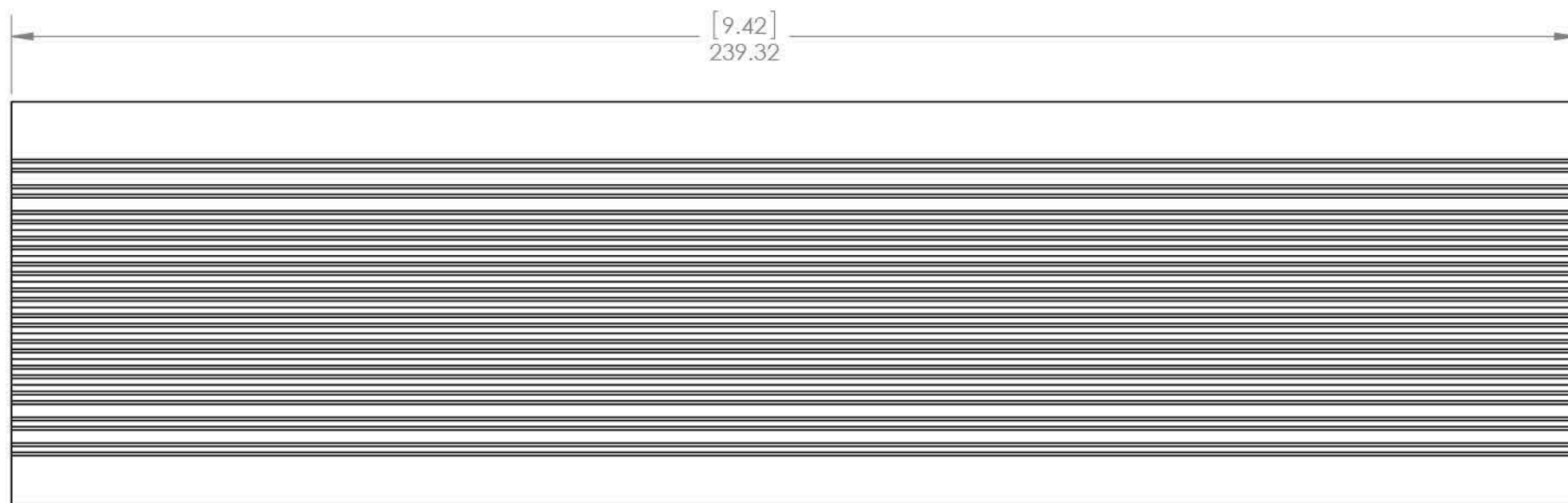
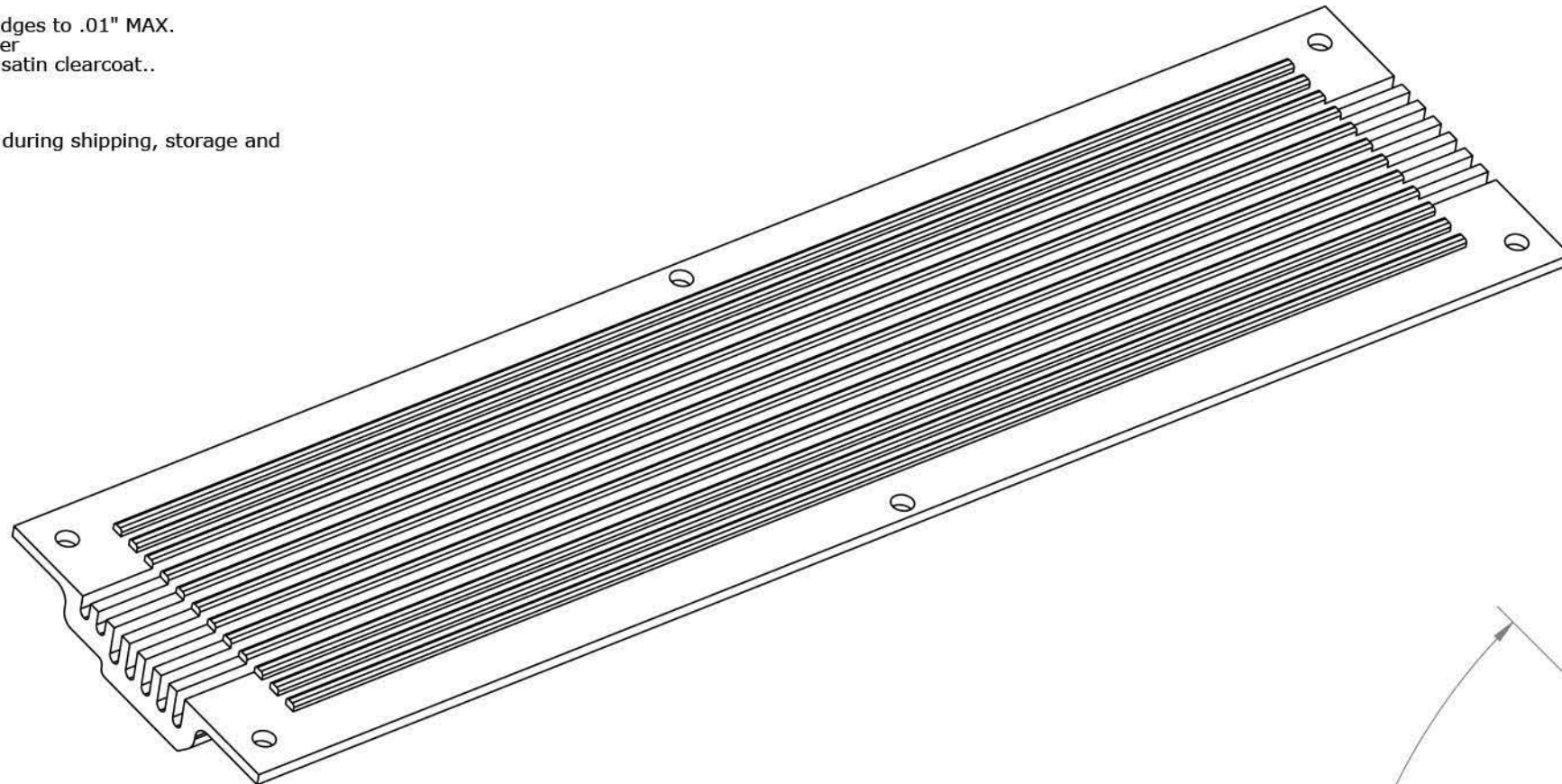
NOTES: UNLESS OTHERWISE SPECIFIED
(OVERRIDES TITLE BLOCK)

1. MATERIAL: 6063 ALUMINUM
2. THICKNESS: 0.40 MAX
3. All Cartesian dimensions, and dimensions originating from centerline are typical to the opposing features.
4. TOLERANCES: Linear +/- 0.015. Positional +/- 0.015". Diametral +/- 0.005". Angular +/- 0.25 degrees.
5. All dimensions are pre-finish.
6. Interpret drawing per ANSI y14.5-1982.
7. Dimensions are critical. All other features are arbitrary.

FINISHING:

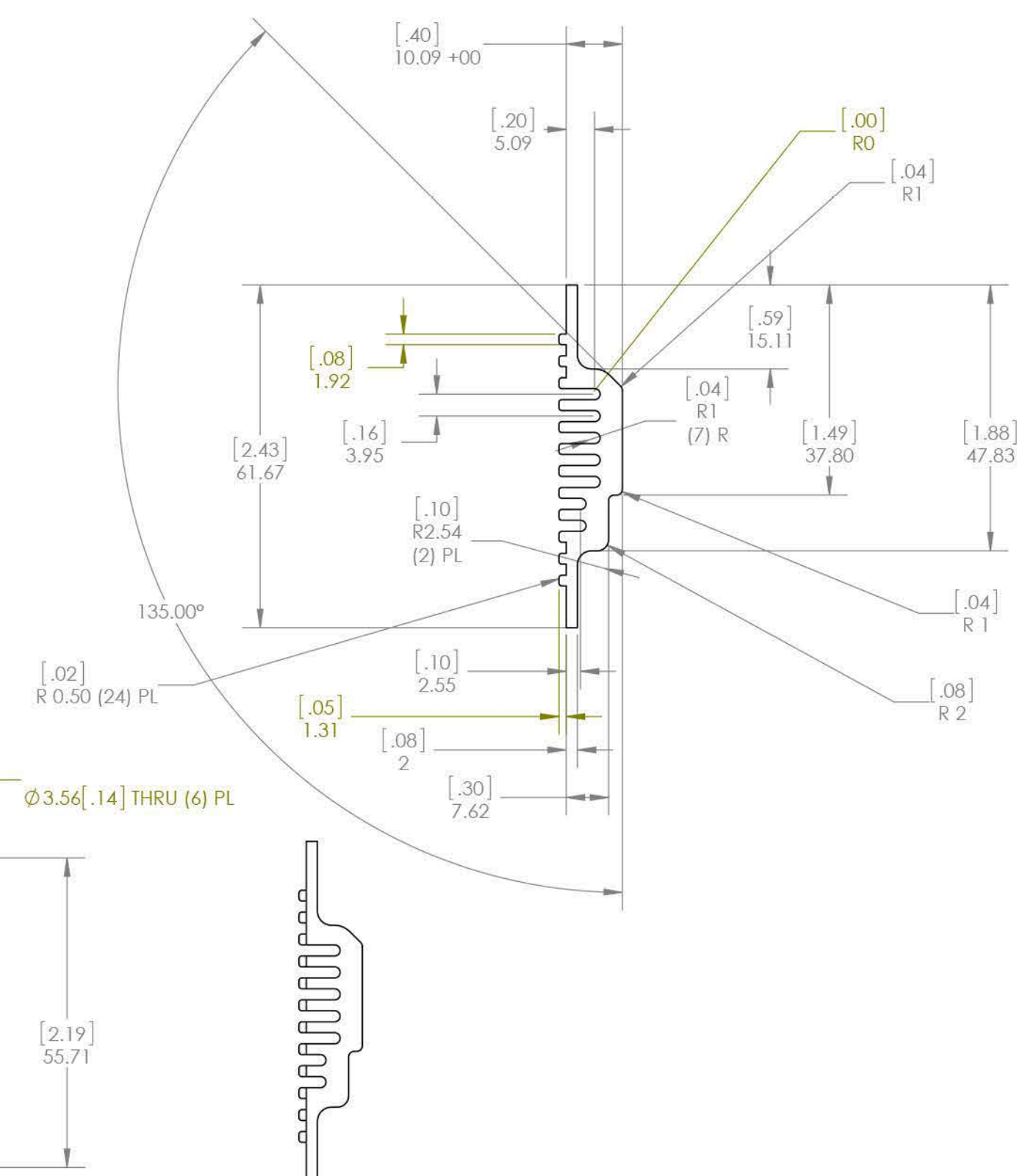
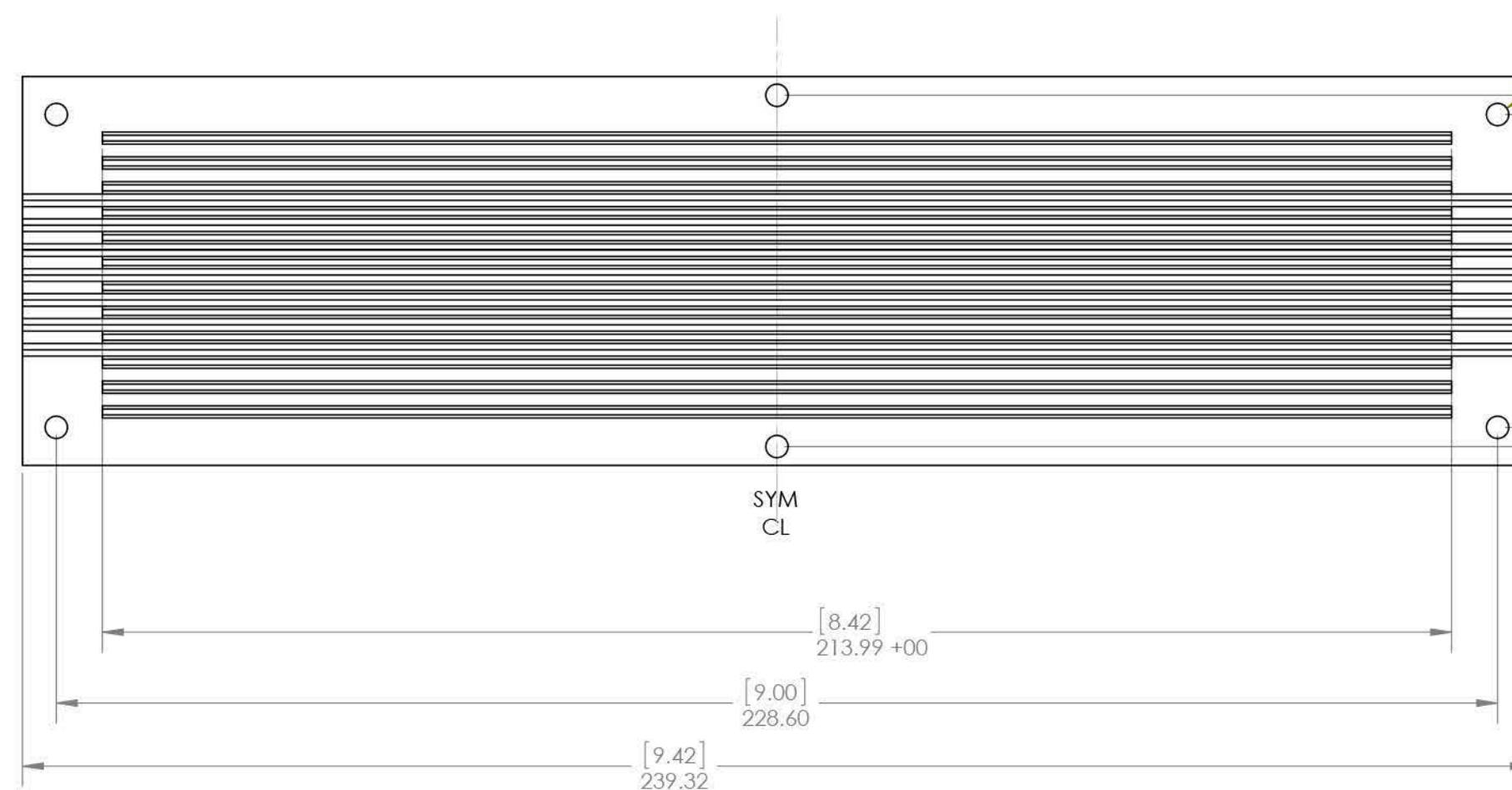
1. Remove all sharp edges to .01" MAX.
2. Light sandblast outer
3. Black anodize with satin clearcoat.
4. MASKING: None.
5. RACKING: None.
6. FINISHING: None.
7. Package to protect during shipping, storage and handling.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED



ABOVE: RAW EXTRUSION

BELOW: EXTRUSION AFTER SECONDARY OPERATIONS



Ø 3.56 [.14] THRU (6) PL

07.15.2017

TITLE SM-MMP-101D (EXTRUDED HEAT SINK)		INTERNAL PART NUMBER	REVISION 1	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME	
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A		SHEET SIZE	
DO NOT SCALE DRAWING				

TOLERANCES AND FINISHES UNLESS STATED OTHERWISE:
 LINEAR: .xxx = +/- 0.005
 .xx = +/- 0.01
 .x = +/- 0.05
 = +/- 0.1
 = .5X LINEAR
 ANGLUAR: .xx = +/- 0.05 deg
 .x = +/- 0.1 deg
 = +/- 0.5 deg

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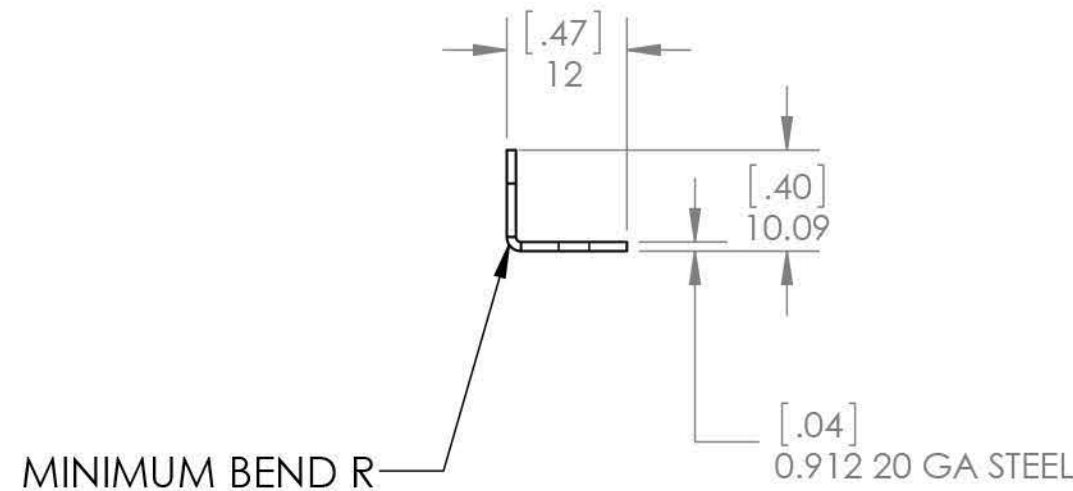
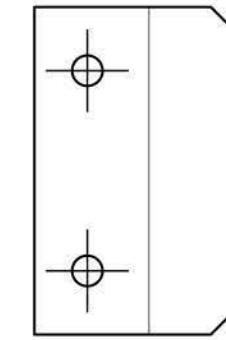
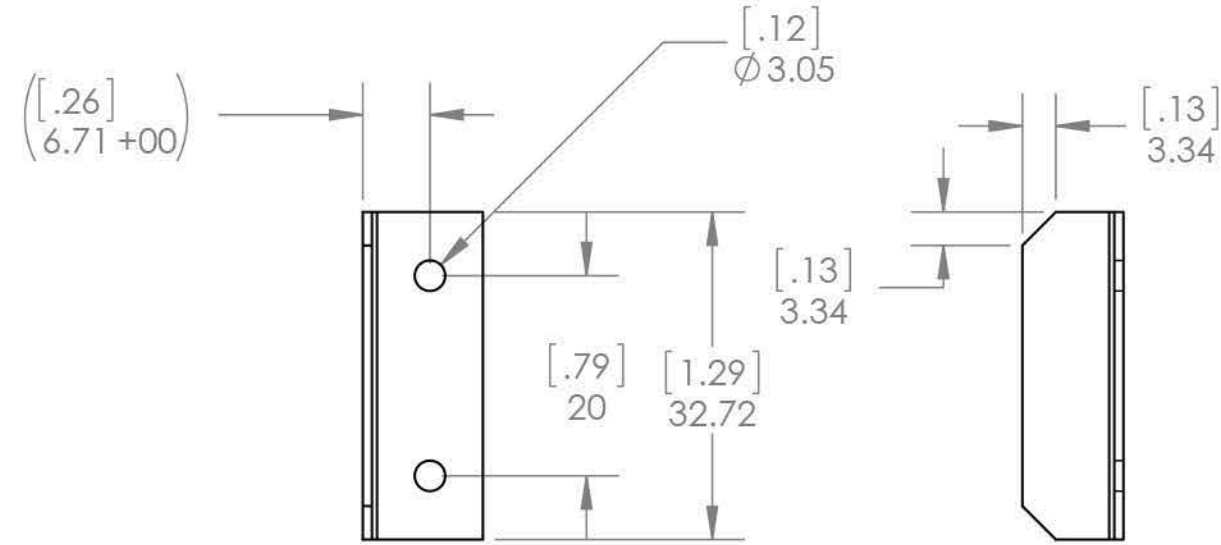
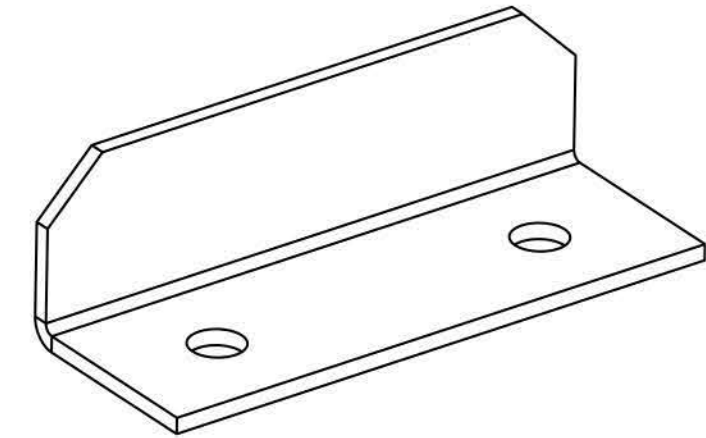
1

NOTES: UNLESS OTHERWISE SPECIFIED (OVERRIDES TITLE BLOCK)

1. MATERIAL: Sheet Steel
2. THICKNESS: 0.0359" (20 Ga Steel).
3. Inside Bend RAD = THICKNESS
4. All Cartesian dimensions, and dimensions originating from centerline are typical to the opposing features.
5. TOLERANCES: Linear +/- 0.015. Positional +/- 0.015". Diametral +/-0.005". Angular +/- 0.25 degrees.
6. All dimensions are pre-finish.
7. Interpret drawing per ANSI y14.5-1982.
8. Dimensions are critical. All other features are arbitrary.

FINISHING:

1. Remove all sharp edges to .01" MAX.
2. Appearance surfaces to be free of cosmetic flaws including, but not limited to: extrusion lines, scratches, dents, tool marks, racking marks.
3. PRE-FINISHING: None.
4. MASKING: None.
5. RACKING: None.
6. FINISHING: None.
7. Package to protect during shipping, storage and handling.



2 REQUIRED FOR ONE PRODUCT ASSEMBLY

07.15.2017

TITLE SM-MP-105 (EXTRUSION EMI PANEL)		INTERNAL PART NUMBER	REVISION	QTY REQ'd 1
DESCRIPTION		MASS N/A	VOLUME	N/A
PROJECT MIMIC CONTROLLER	CLIENT Steven Slate	MATERIAL		
DRAWING NAME	CREATION DATE 09/17/2016	DRAWN BY R. Spindel	SCALE SCALE: 1:1	SHEET COUNT SHEET 1 OF 1
VENDOR Various	VENDOR STOCK NUMBER N/A	SHEET SIZE DO NOT SCALE DRAWING		
TOLERANCES AND FINISHES UNLESS STATED OTHERWISE:				
LINEAR: x.xxx = +/- 0.005 FRACT: AS CAST, AS MACHINED .010" MAX x.xx = +/- 0.01 FINISH: BREAK ALL SHARP CORNERS x.x = +/- 0.05 x = +/- 0.1 RADII: = .5X LINEAR ANGULAR: x.xx = +/- 0.05 deg x.x = +/- 0.1 deg x = +/- 0.5 deg				
		SPINDEL DESIGN PO BOX 3446 Los Angeles CA 91394 818.363.3456 www.spindel.com		