



CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DRWG NO. REV GID

E1000672-v3

SHEET 1 OF 2

ASSEMBLY NO:

D0900136

OVERALL BILL OF MATERIALS

TITLE: OUTPUT FARADAY ISOLATOR, METAL MECHANICAL PARTS & QUANTITIES

	APPROVALS:	DATE:	REV	DCN NO.	BY	CHECK	DCC	DATE
DRAWN / AUTHOR: <small>(REFERENCE CONTENTS)</small>	CIT, CC	2-Mar-11	v3	E1000563	MR			
CHECKED:								
APPROVED:								
DCC RELEASE								

ITEM NO	REQ.	SPARE	TOT.	PART NUMBER	REVISION	DESCRIPTION	MATERIAL
1	1		1	D0900015	V2	Faraday Isolator Table	6061-T6 Al
2	1		1	D0900026	V3	Magnet Mount Plate	6061-T6 Al
3	2		2	D0900027	V2	Copper Plate	Copper
4	1		1	D0900168	V3	Crossbar Plate	6061-T6 Al
5	4		4	D0900169	V3	Crossbar Side	6061-T6 Al
6	1		1	D0900352	V3	Half Wave Plate Holder	6061-T6 Al
7	1		1	D0900439	V2	TFP Polarizer Plate	6061-T6 Al
8	2		2	D0900566	V2	Up Blade Clamp Top	6061-T6 Al
9	4		4	D0900578	V3	Blade Guard Riser	6061-T6 Al
10	4		4	D0900582	V2	Music Wire Split Clamp 1	304, 316 or 302 SSSL
11	4		4	D0900583	V4	Music Wire Split Clamp 2	304, 316 or 302 SSSL
12	4		4	D0900588	V3	Wire Adjustable Adapter	6061-T6 Al
13	1		1	D0900616	V2	Prism Mount Base LH	6061-T6 Al
14	2		2	D0900618	V1	Optical Prism Top Plate	6061-T6 Al
15	4	2	6	D0900619	V1	Clip	304 SSSL
16	1		1	D0900620	V3	Prism Mount Base RH	6061-T6 Al
17	2		2	D0900778	V2	Magnet Attachment Plate	430F or 430FR
18	2		2	D0901271	V3	Blade Guard Crosspiece	6061-T6 Al
19	2		2	D0901514	V1	Blade Clamp Platform	6061-T6 Al
20	2		2	D0901569	V3	Magnet Plate Mounting Front Bracket	6061-T6 Al
21	1		1	D0901570	V3	Magnetic Plate Mounting Back Bracket	6061-T6 Al
22	2		2	D0901764	V2	Table Balance Weight	304, 316 or 302 SSSL
23	1		1	D0902845	V3	Reflection Baffle	A424, Type1, 18 Ga or 304
24	1		1	D1001859	V2	Fixed Stop RH	6061-T6 Al
25	1		1	D1001860	V2	Spring Block RH	6061-T6 Al
26	2	1	3	D1001861	V2	U-Spring	
27	4		4	D1001862	V4	Prism Base Support	6061-T6 Al
28							
29	1		1	D1001870	V2	Fixed Stop LH	6061-T6 Al
30	1		1	D1001871	V2	Spring Block LH	6061-T6 Al
31	1		1	D1001915	V3	Input Baffle Holder	6061-T6 Al
32	2		2	D1001916	V3	Input Baffle Side Support	6061-T6 Al
33	1		1	D1001917	V2	Input Baffle Base	6061-T6 Al
34	6	1	7	D1001919	V1	Beam Dump Mounting Clamp	304 SSSL
35	1		1	D1001959	V2	Recticle Holder	6061-T6 Al
36	4		4	D1001960	V1	Wire Support Block	6061-T6 Al
37	1		1	D1001961	V3	Output Alignment Fixture Base	6061-T6 Al



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SHEET 1 OF 2

ASSEMBLY NO:

D0900136

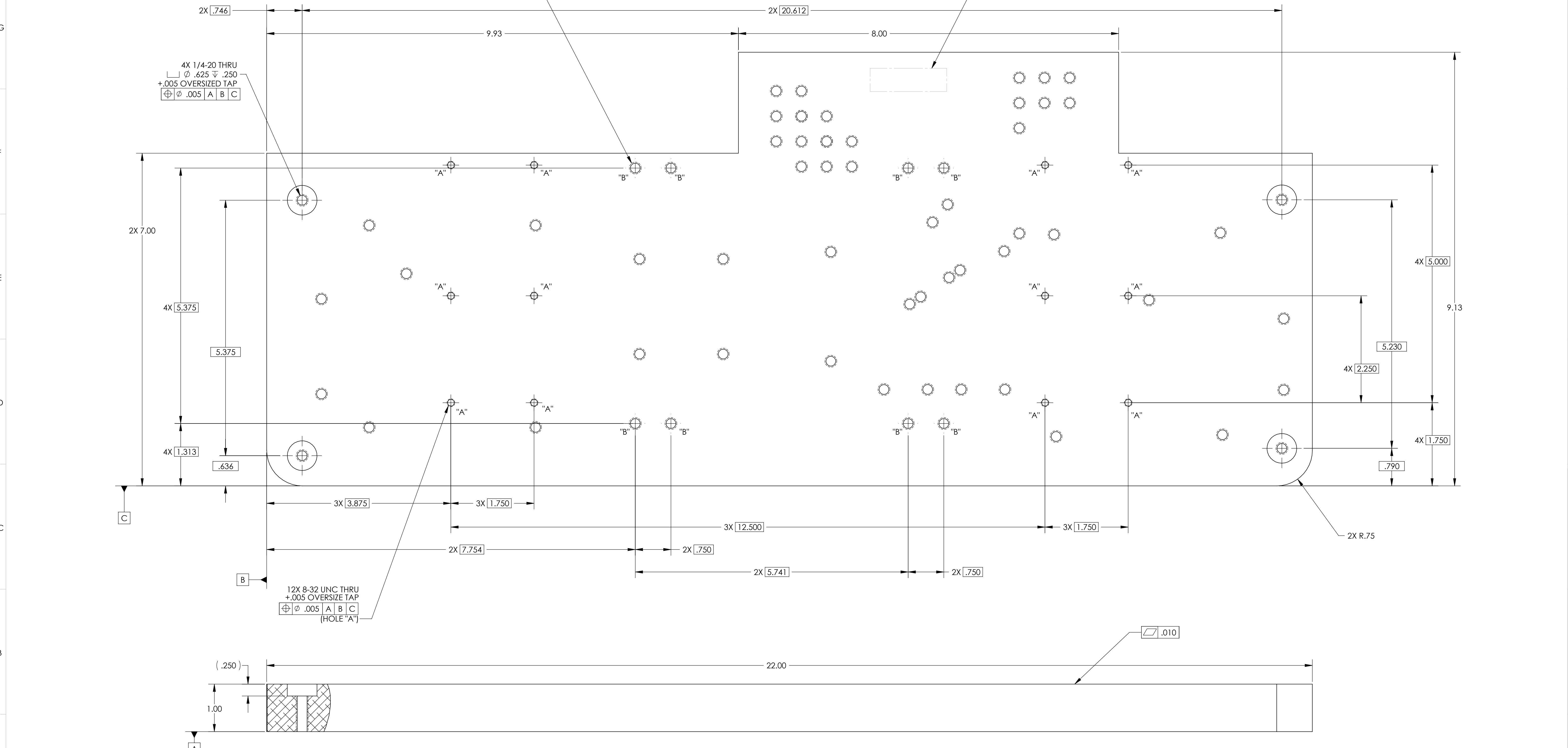
OVERALL BILL OF MATERIALS

TITLE: OUTPUT FARADAY ISOLATOR, METAL MECHANICAL PARTS & QUANTITIES

38	1		1	D1001962	V4	Output Alignment Fixture Support	6061-T6 Al
39	1		1	D1002112	V2	Magnetic Plate Mount Back (Lowered) Bracket	6061-T6 Al
40	2		2	D1002168	V2	Music Wire Split Clamp 3	304, 316 or 302 SSSL
41	2		2	D1002169	V1	Music Wire Split Clamp 4	304, 316 or 302 SSSL
42	1		1	D1002257	V2	Crossbar Plate In	6061-T6 Al
43	2		2	D1002362	V2	Faraday Isolator Beam Dump Mount	6061-T6 Al
44	2		2	D1002533	V1	Output Faraday Isolator Dummy Weight	304, 316 or 302 SSSL
45	2		2	D1002540	V1	Output Faraday Isolator Dummy Weight (Rotate)	304, 316 or 302 SSSL
46	4		4	D1002542	V3	Table Balance Weight .75#	304, 316 or 302 SSSL
47	12	2	14	D1100027	V1	Clip	304 SSSL
48	2		2	D1100556	V1	IRIS DIAPHRAGM MOUNT	304, 316 or 302 SSSL
	2	1	3	D0900991	V1	LG., FULLY THD, ROUNDED END	300 SSSL, 18- 8 SSSL

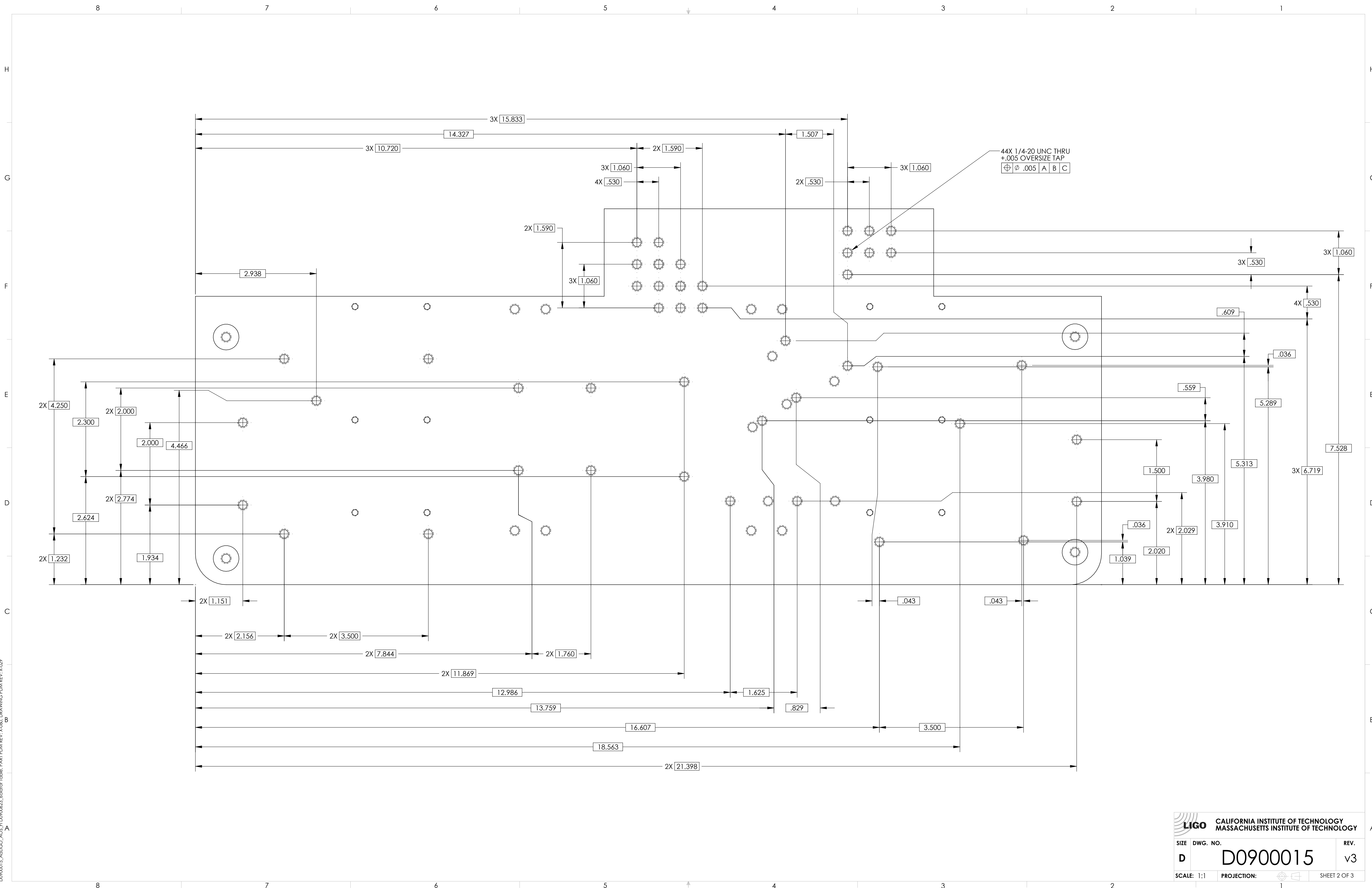
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR TYPE IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.


REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	
v2	28 JAN 2011	E1000563	
v3	30 JAN 2011	E1000563	



D090001E_AudiLIGO_AOS_PFD0900623_Isolator Table_PART PDM REV: X-010_DRAWING PDM REV: X-029

DIMENSIONS ARE IN		NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
.XX	± .02	1. INTERPRET DRAWING PER ASME Y14.5-1994.	2. REMOVE ALL SHARP EDGES, R.02 MIN.			FARADAY ISOLATOR TABLE	
.XXX	± .010	3. DO NOT SCALE FROM DRAWING.	4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.				
ANGULAR ± .5°		MATERIAL	FINISH	NEXT ASSY	DESIGNER	SIZE	DWG. NO.
		6061-T6 Al	63 μ inch	D0900623	M.RUIZ	D	D0900015
					CHECKER	09 Sept. 2010	REV.
					APPROVAL		v3
					SCALE: 1:1	PROJECTION:	SHEET 1 OF 3




CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIZE	DWG. NO.	REV.
D	D0900015	v3
SCALE: 1:1	PROJECTION:	SHEET 2 OF 3

D0900015_AutLIGO_ACS_FID09000023_Isometric Table: PART PDM REV: X.010, DRAWING PDM REV: X.029

8

7

6

5

4

3

2

1

H

G

F

E

D

C

B

A

H

G

F

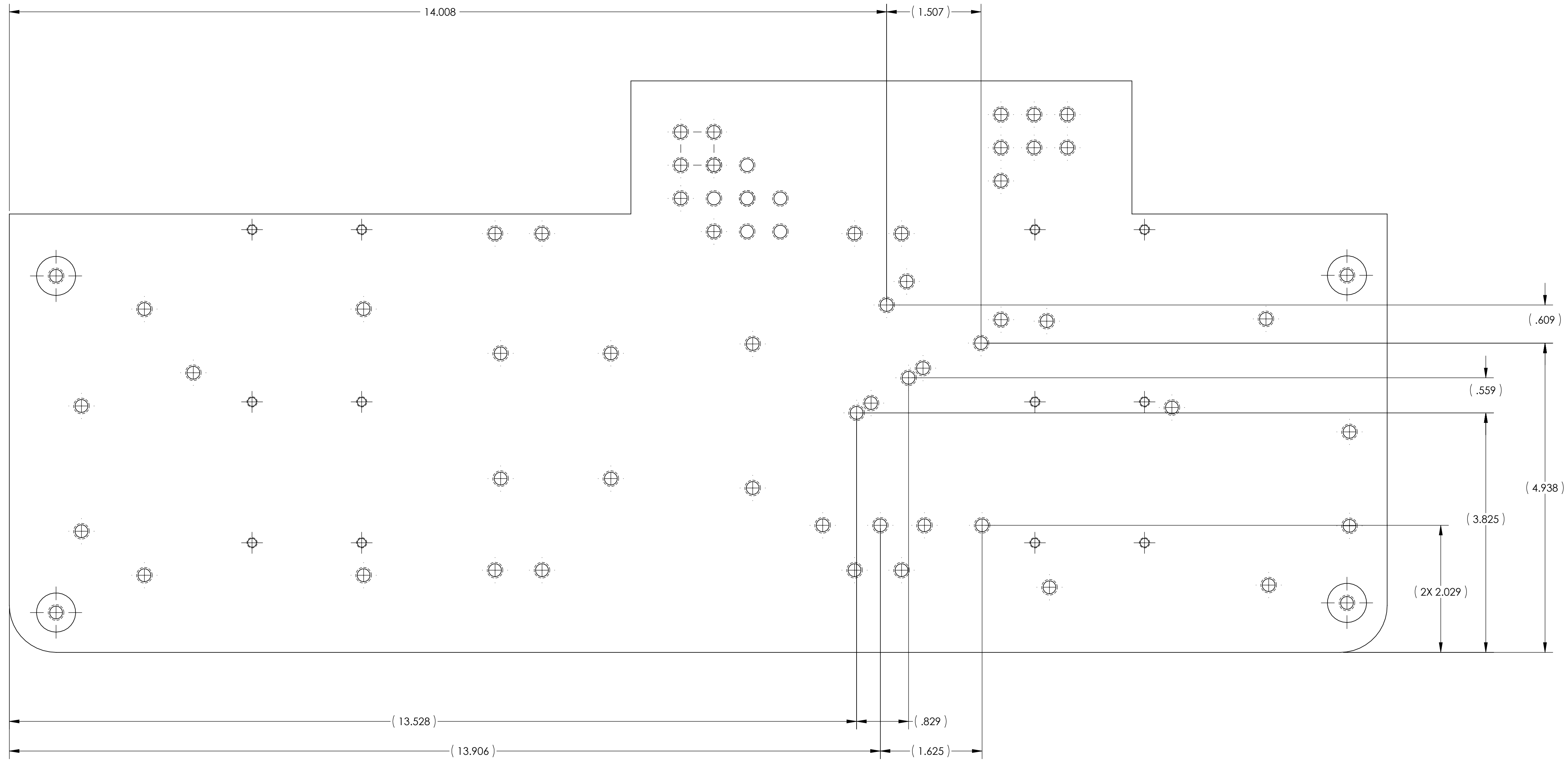
E

D

C

B

A



(EXISTING HOLES-NOT USED FOR LASTEST VERSIONS, SHOWN BE REMOVED IF REMADE)

 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
D	D0900015	v3
SCALE: 1:1	PROJECTION:	SHEET 3 OF 3

8

7

6

5

4

3

2

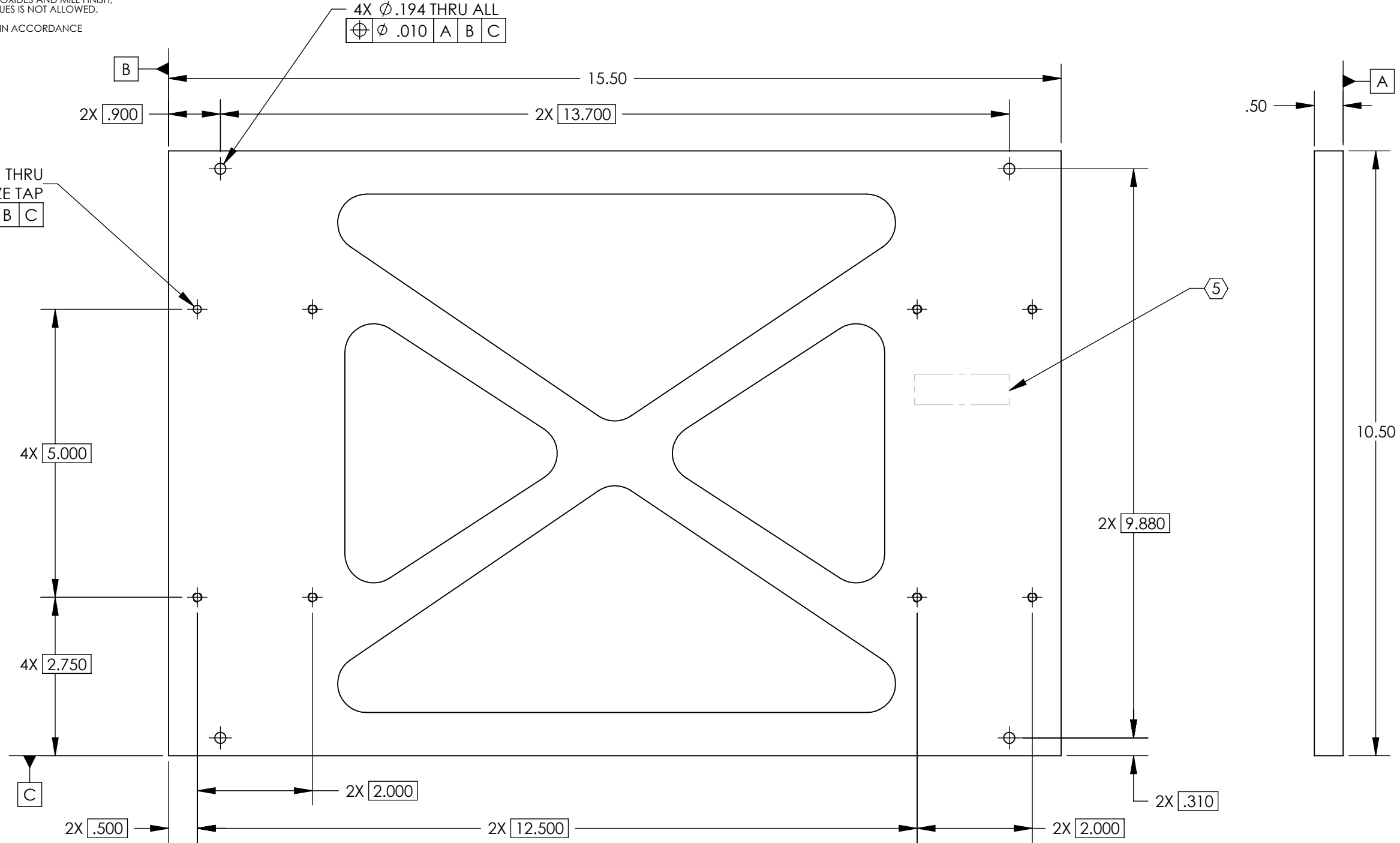
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D0900015_AudiLIGO_ACS_FT09060623_Isometric Table PART PDM REV: X.010, DRAWING PDM REV: X.029

8 7 6 5 4 3 2 1

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
V1	28 JUL 2009	E0900217	
v2	07 OCT 2010	E1000563	
v3	28 FEB 2011	E1000563	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN	
TOLERANCES: .XX ± .02 .XXX ± .010	
ANGULAR ± 0.5°	
1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	
MATERIAL	6061-T6 Al
FINISH	63 μinch

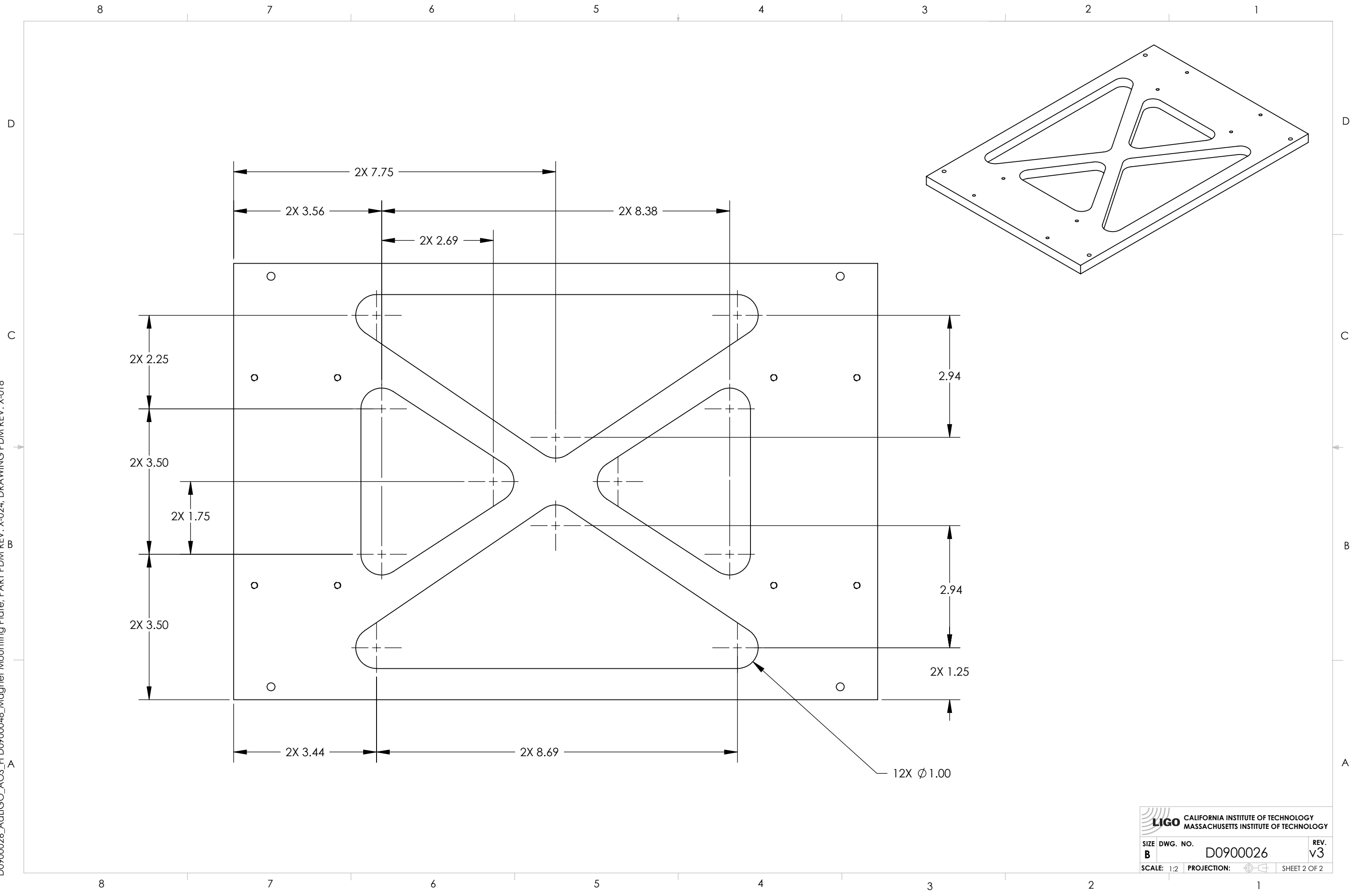
CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME	
	MAGNET MOUNTING PLATE	
SYSTEM	ADVANCED LIGO	SUB-SYSTEM
NEXT ASSY	D0900048	AOS


DESIGNER	N. Nguyen	22 Jul 2009	SIZE DWG. NO. B	REV. v3
DRAFTER				
CHECKER	K. Malland	28 Jul 2009	SCALE: 1:2 PROJECTION:	SHEET 1 OF 2
APPROVAL	C. Torrie	28 Jul 2009		

D0900026_AdlIGO_AOS_FID0900048_Magnet Mounting Plate, PART PDM REV: X-024, DRAWING PDM REV: X-018

8 7 6 5 4 3 2 1

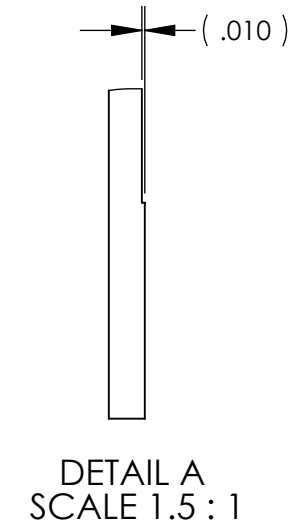
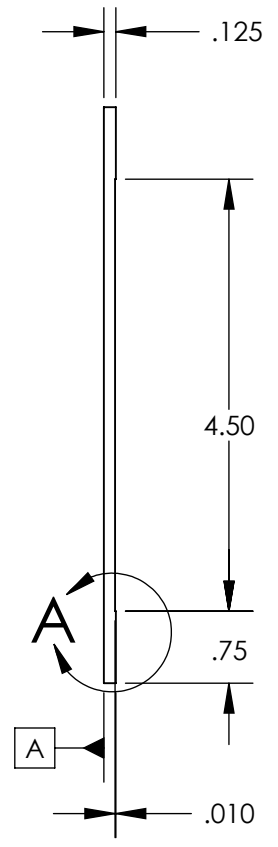
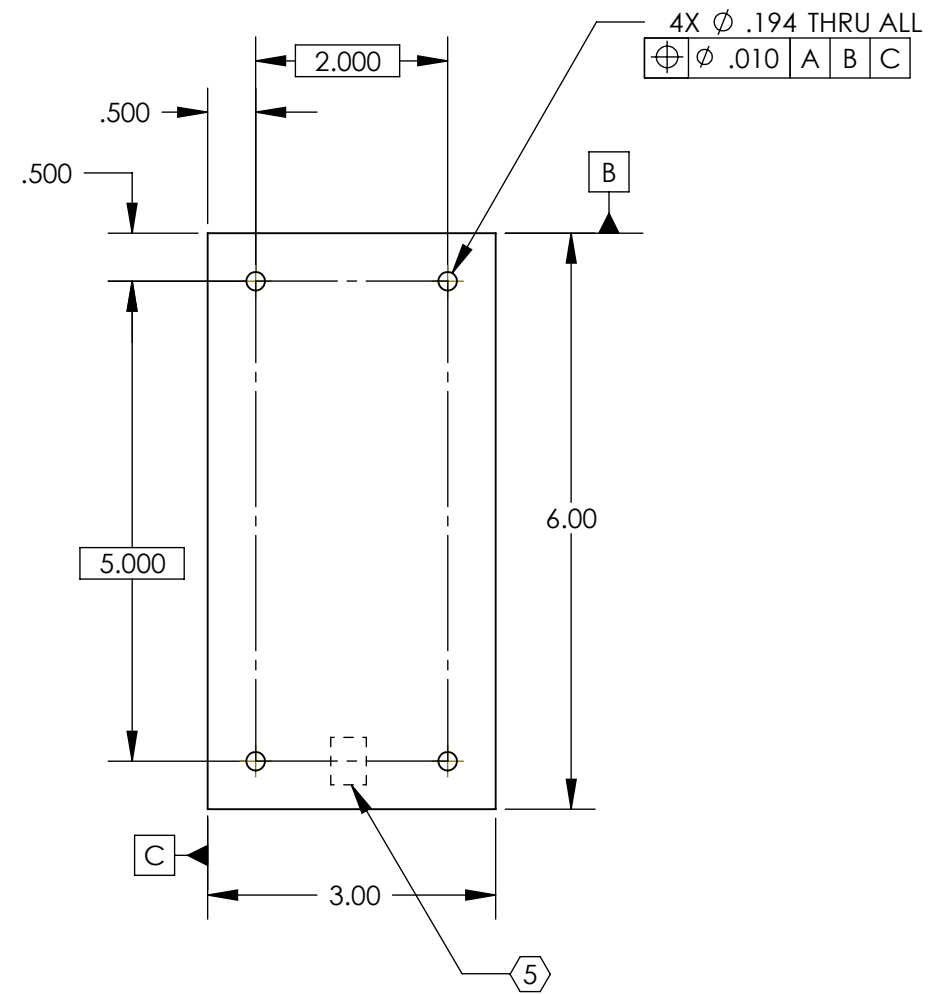
D0900026_AcLIGO_AOS_FI D09000048_Magnet Mounting Plate, PART PDM REV: X-024, DRAWING PDM REV: X-018



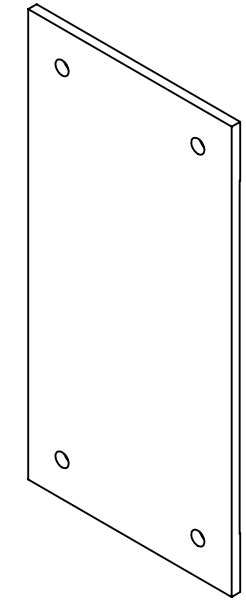
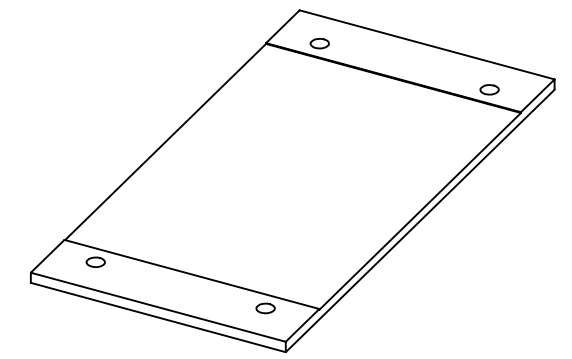
 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
B	D0900026	v3
SCALE: 1:2	PROJECTION:	SHEET 2 OF 2

- NOTES CONTINUED:**
- 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 - 6. ~~MACHINE EXPOSURES TO REMOVE OXIDES~~ AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 - 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	19 JUL 2009		
v2	07 OCT 2010	E1000563	



DETAIL A
SCALE 1.5 : 1



D0900027_AdlIGO_AOS_D0900623_Copper Plate, PART PDM REV: X-009, DRAWING PDM REV: X-014

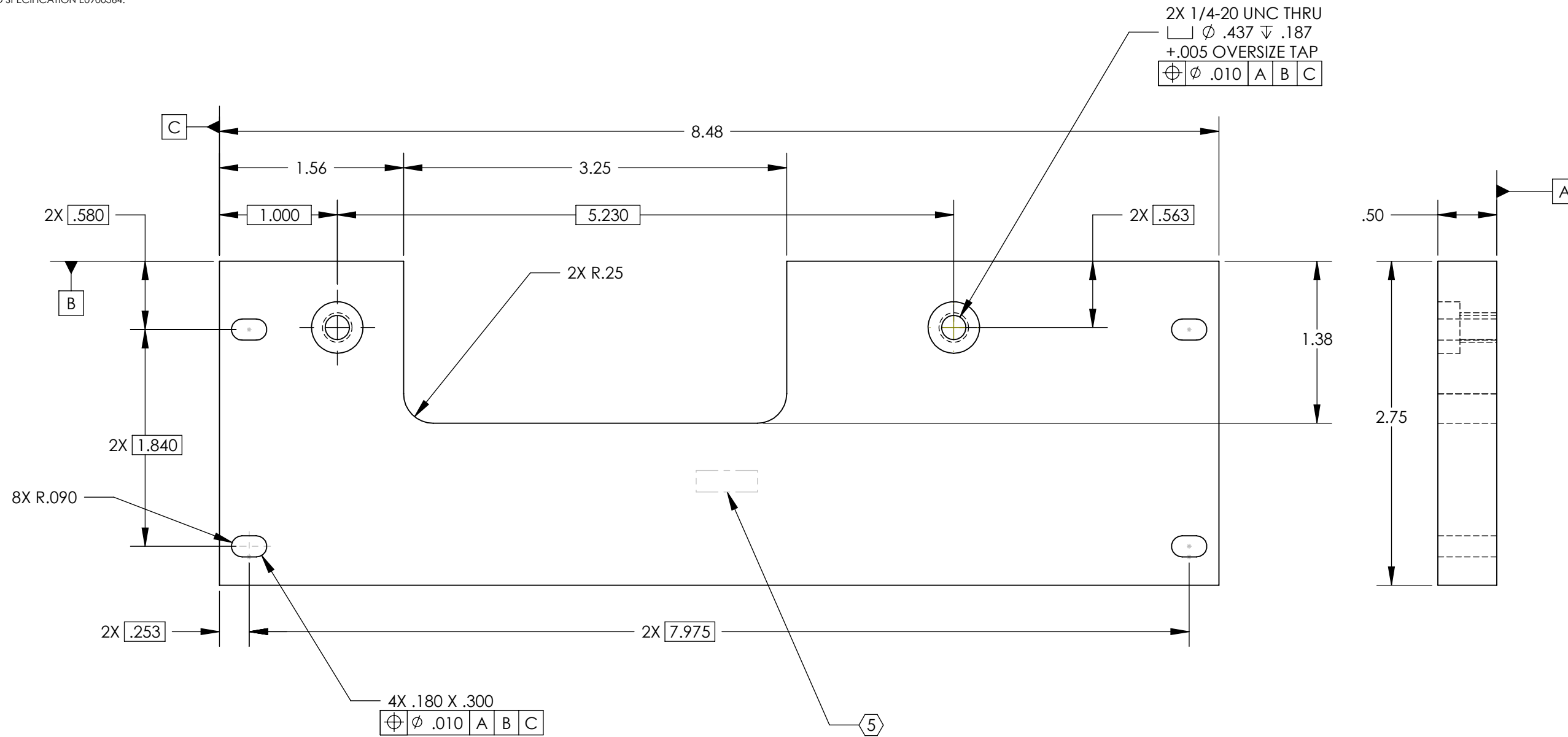
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX $\pm .02$.XXX $\pm .010$ ANGULAR $\pm ^\circ$				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		COPPER PLATE	
MATERIAL		FINISH		SYSTEM		SUB-SYSTEM	
99.99% COPPER		63 μ inch		ADVANCED LIGO		AOS	
NEXT ASSY				DESIGNER		SIZE DWG. NO.	
D0900048				DRAFTER		B D0900027	
				CHECKER		REV.	
				APPROVAL		v2	
				SCALE: 1:1		PROJECTION:	
						SHEET 1 OF 1	

D0900168_AdlIGO_AOS_D0900170_Crossbar Plate, PART PDM REV: X-011, DRAWING PDM REV: X-016

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

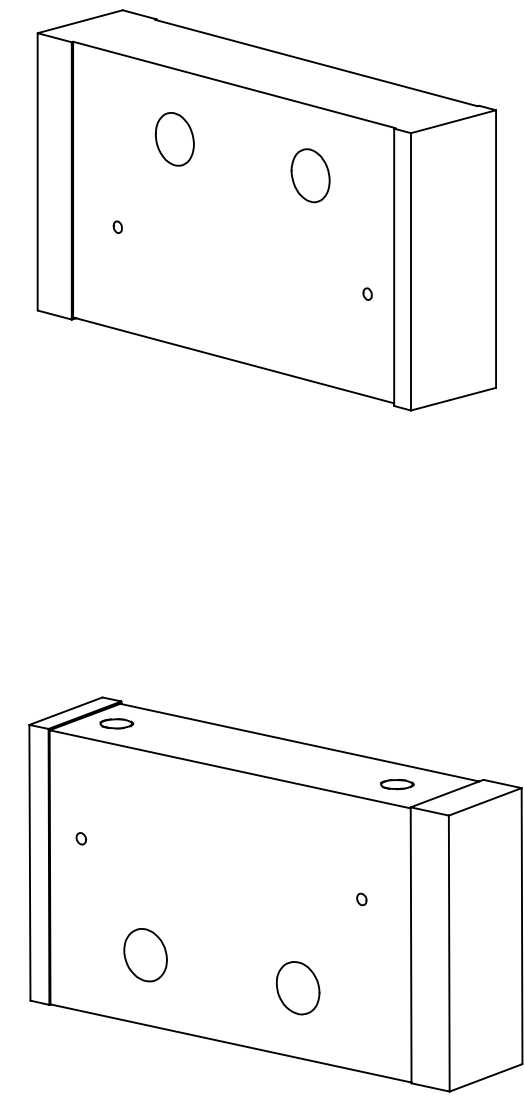
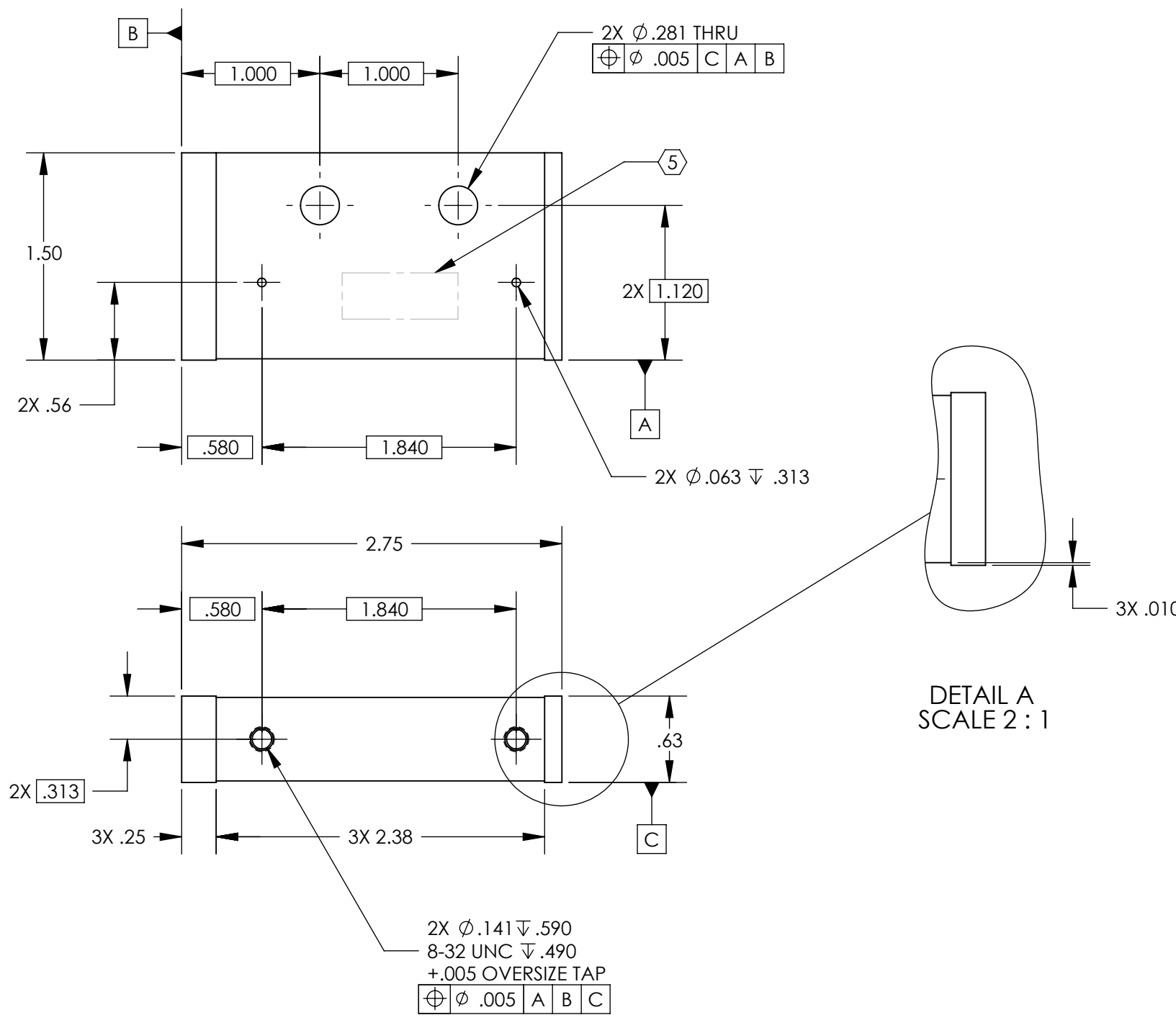
REV.	DATE	DCN #	DRAWING TREE #
v1	01 JUL 2009	DCN #	
v2	07 OCT 2010	E1000563	
v3	28 FEB 2011	E1000563	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .02 .XXX ± .010 ANGULAR ± 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410.		CROSSBAR PLATE	
MATERIAL 6061-T6 Al		FINISH 63 μinch		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
NEXT ASSY D0900170				DESIGNER N.Nguyen		SIZE DWG. NO. B D0900168	
				DRAFTER M. SMITH		REV. v3	
				CHECKER C. TORRIE		SCALE: 1:1	
				APPROVAL C. TORRIE		PROJECTION:	
						SHEET 1 OF 1	

- NOTES CONTINUED:**
- 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 - 6. ~~REMOVE BURRS, CHIPS, AND PROTRUSIONS BY HAND OR WITH A VIBRATORY TOOL. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.~~
 - 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	01 JUL 2009	DCN #	
v2	07 OCT 2010	E1000563	
v3	28 FEB 2011	E1000563	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .02 .XXX ± .010 ANGULAR ± °				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410.		CROSSBAR SIDE	
MATERIAL 6061-T6 Al				FINISH 63 μinch		SYSTEM ADVANCED LIGO SUB-SYSTEM AOS	
NEXT ASSY D0900170 & D1002256				DESIGNER N.Nguyen 26 MAY 2009		SIZE DWG. NO. B D0900169	
				CHECKER M. SMITH 01 JUL 2009		REV. v3	
				APPROVAL C. TORRIE 01 JUL 2009		SCALE: 1:1 PROJECTION: SHEET 1 OF 1	

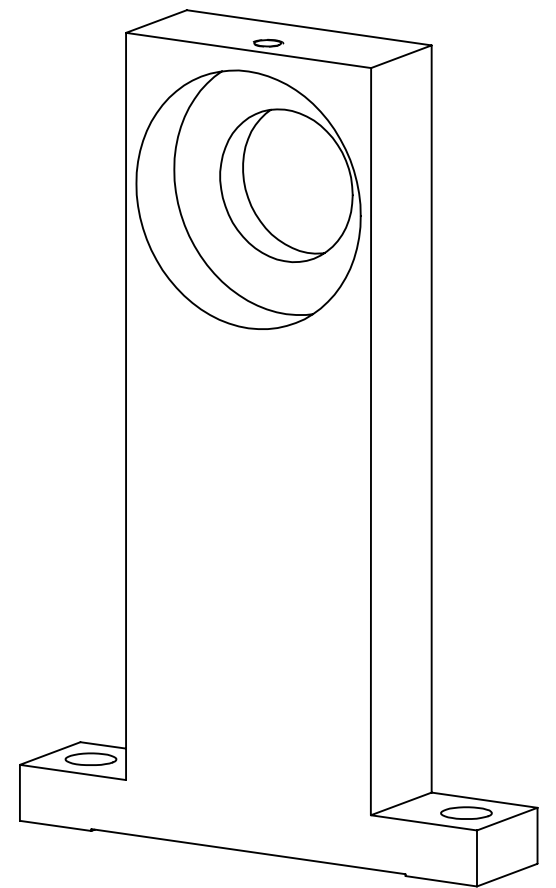
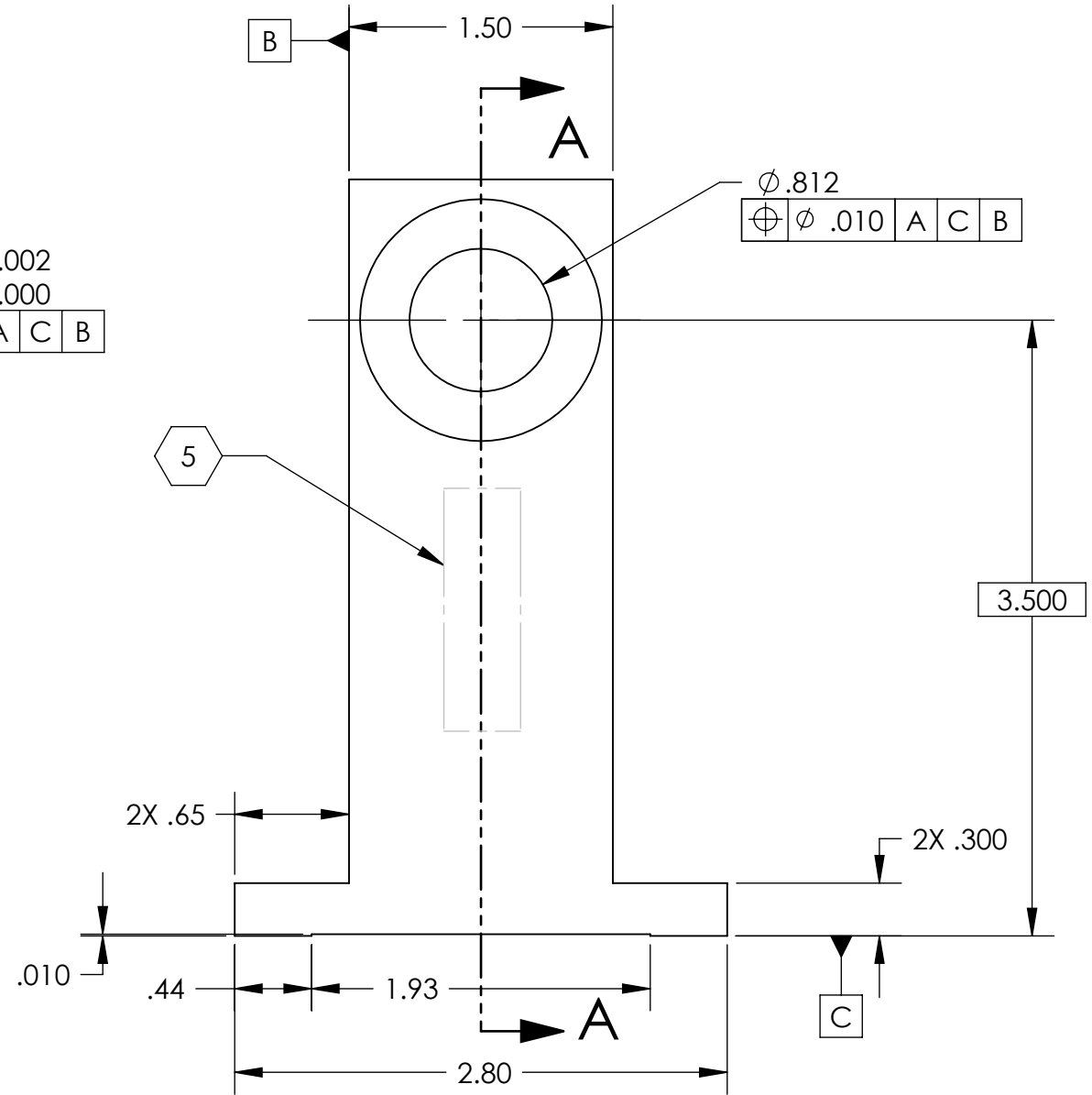
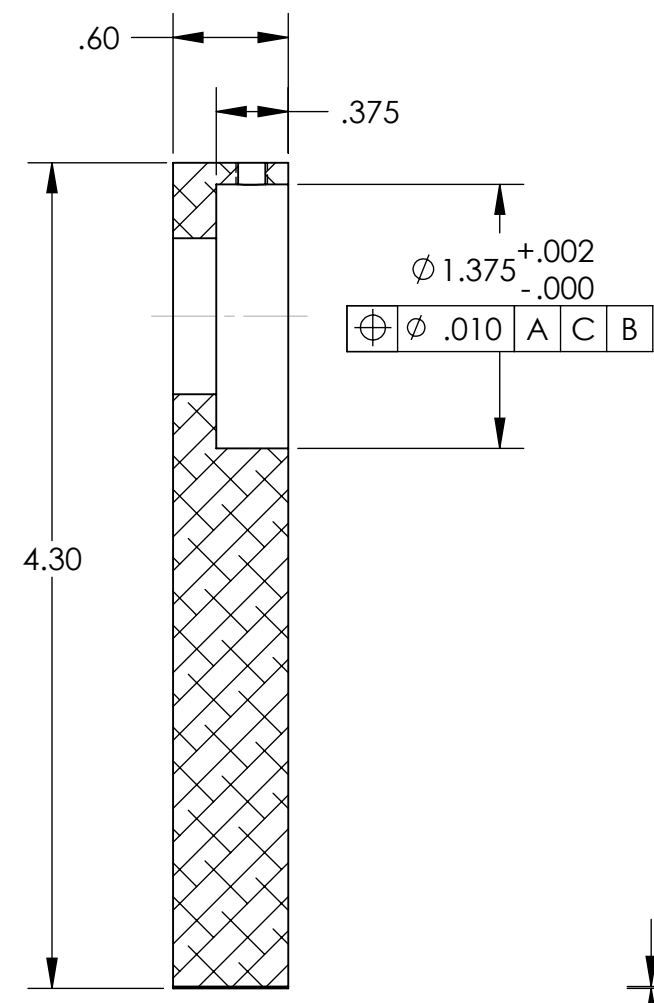
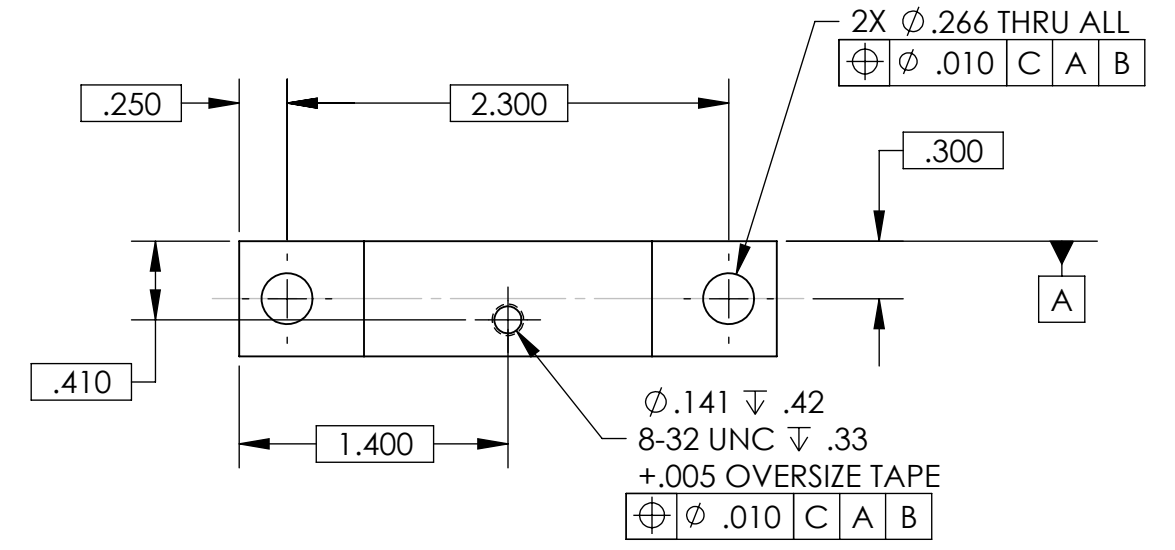
D0900169_AdlIGO_AOS_D0900170_Crossbar Side, PART PDM REV: X-014, DRAWING PDM REV: X-014

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO. REFER TO LIGO-E0900364.

7. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	
v2	07 JAN 2011	E1000563	
v3	28 FEB 2011	E1000563	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES, R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

TOLERANCES:
 .XX ± .02
 .XXX ± .010
 ANGULAR ± 0.6°

DIMENSIONS ARE IN INCHES

MATERIAL	6061-T6 Al	FINISH	63 µinch
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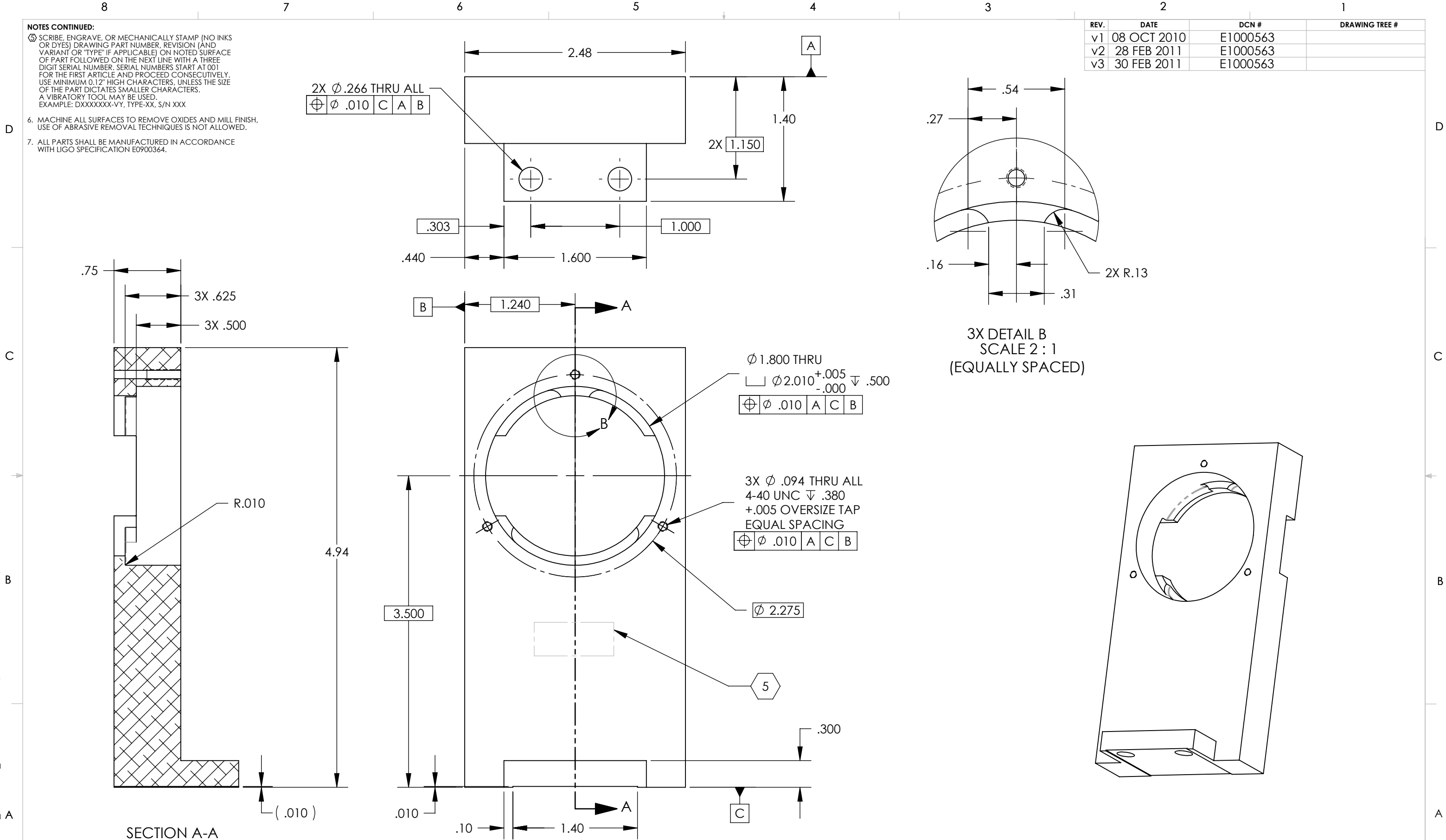
CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME		HALF WAVE PLATE HOLDER	
SYSTEM	ADVANCED LIGO	SUB-SYSTEM	AOS	DESIGNER	
DRAFTER	N.Nguyen	DATE	09 FEB 2010	SIZE	DWG. NO.
CHECKER				B	D0900352
APPROVAL				REV.	v3
NEXT ASSY				SCALE:	1:1
D0900353				PROJECTION:	
					SHEET 1 OF 1

D0900352_AdlIGO-AOS_D0900353_Half Wave Plate Holder, PART PDM REV: X-011, DRAWING PDM REV: X-010

D0900439_AdlIGO_AOS_D0900440_TFP Polarizer Plate, PART PDM REV: X-017, DRAWING PDM REV: X-024

- NOTES CONTINUED:**
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	
v2	28 FEB 2011	E1000563	
v3	30 FEB 2011	E1000563	

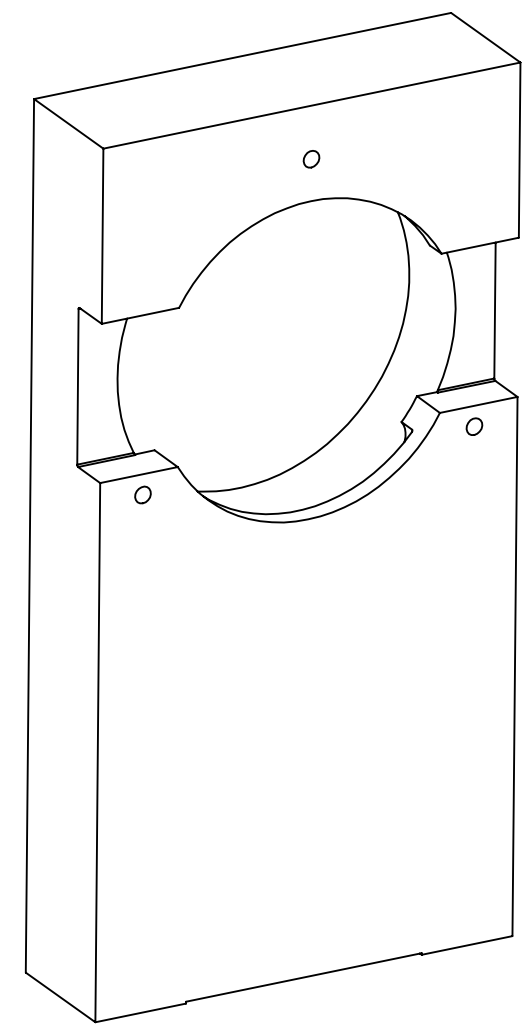
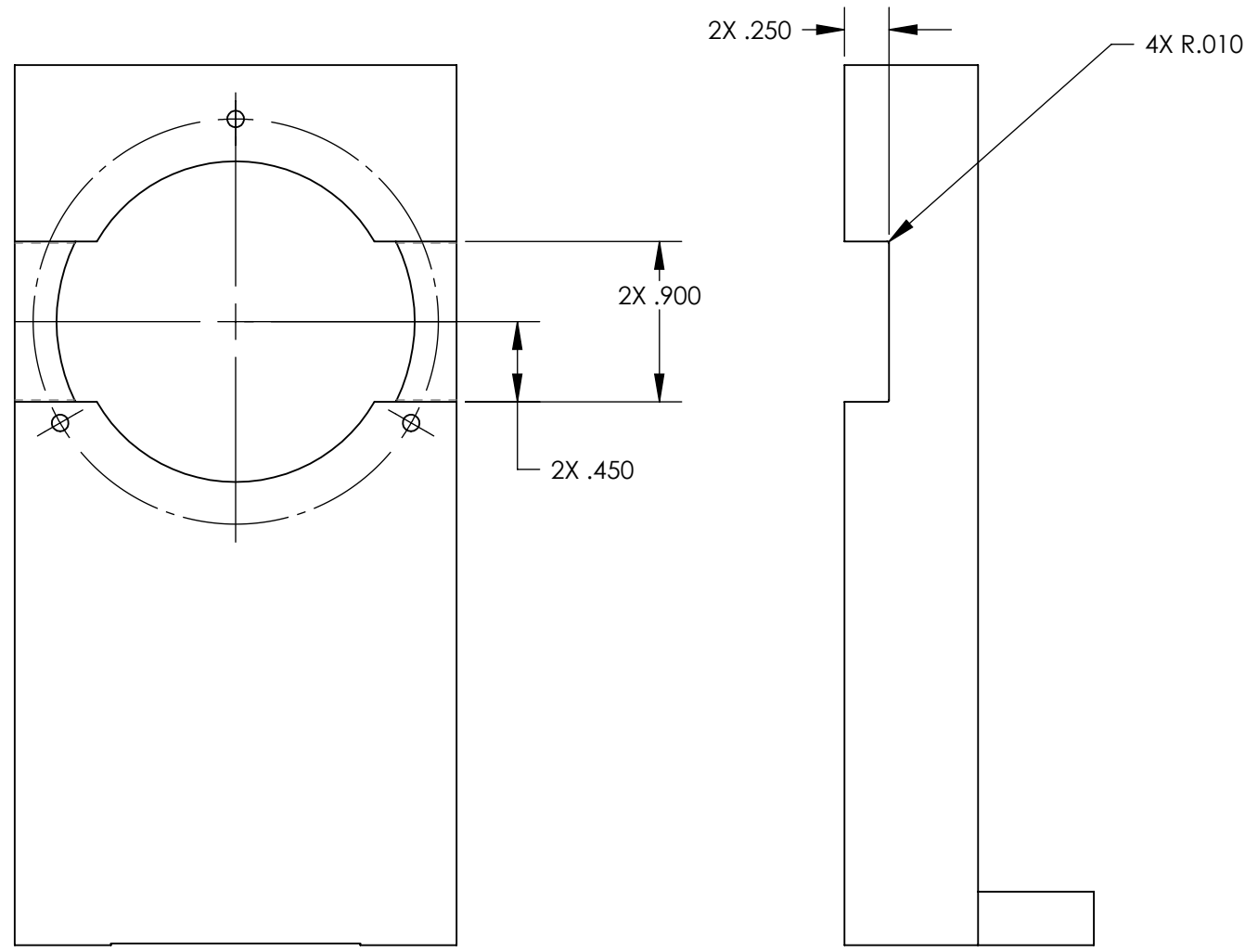


D0900439_AcLIGO_AOS_D0900440_TFP Polarizer Plate, PART PDM REV: X-017, DRAWING PDM REV: X-024

8 7 6 5 4 3 2 1

D
C
B
A

D
C
B
A

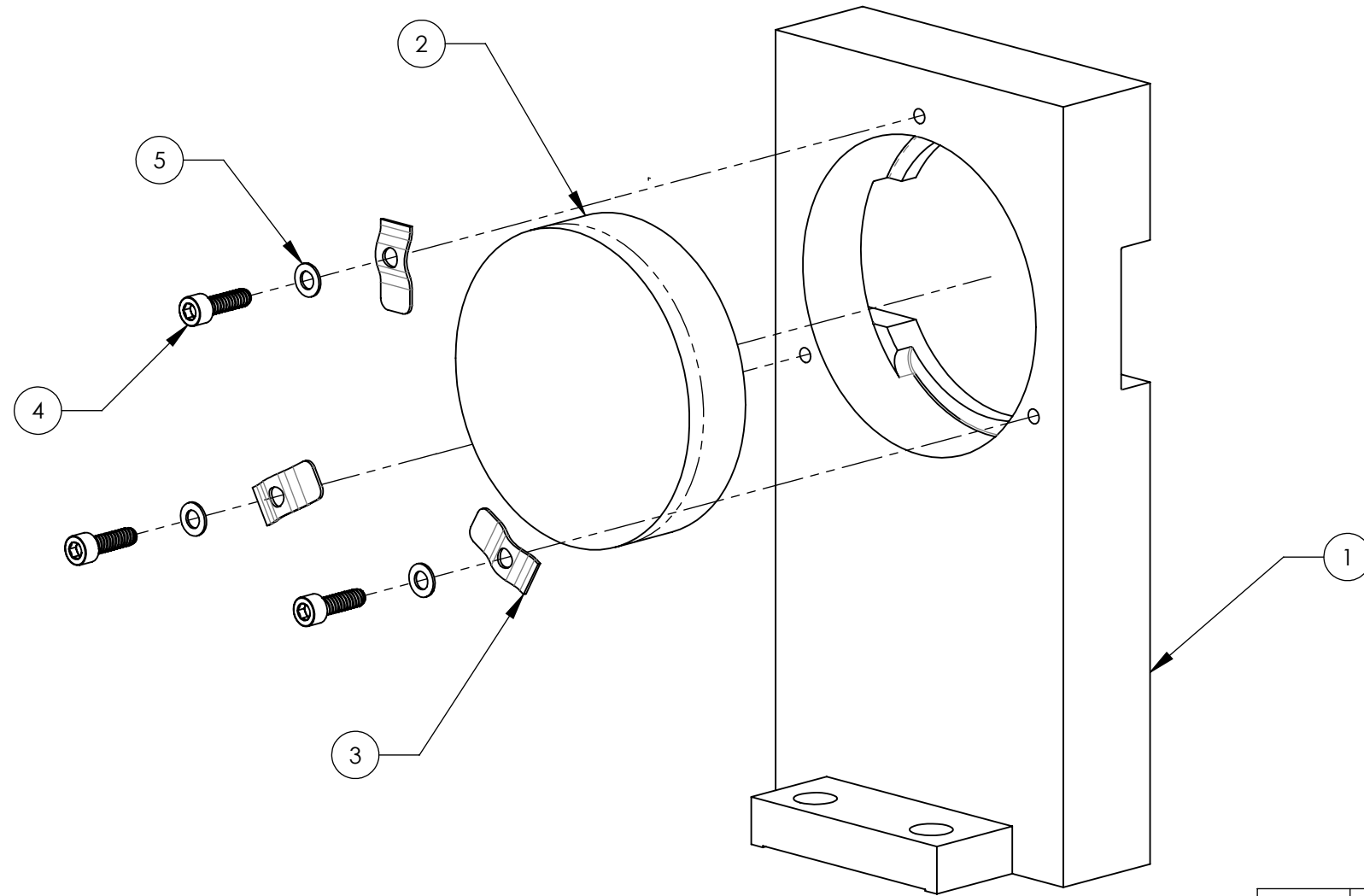


 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		
SIZE	DWG. NO.	REV.
B	D0900439	v3
SCALE: 1:1	PROJECTION:	SHEET 2 OF 2

8 7 6 5 4 3 2 1

D0900440_AdlIGO_AOS_D0900623_TFP Polarizer Plate Assy, PART PDM REV: X-079, DRAWING PDM REV: X-009

REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	
v2	01 MAR 2011	E1000563	
v3	29 MAR 2011	E1000563	



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	REQ	SPARE	TOTAL
5	-	WASHER, FLAT, #4 (NAS 620-C4L OR EQUIVALENT)	300 SSSL	3		3
4	92200A108	Head Cap Screw 300 Series SS, 4-40 Thrd, 3/8" Length, MS 16995-10	18-8 SSSL	3		3
3	D1001919	BEAM DUMP MOUNTING CLAMP	304 SSSL	3		3
2	TFP-1064-PW-2025-UV	THIN FILM POLARIZER		1		1
1	D0900439	TFP POLARIZER PLATE	6061-T6 Al	1		1

PARTS LIST

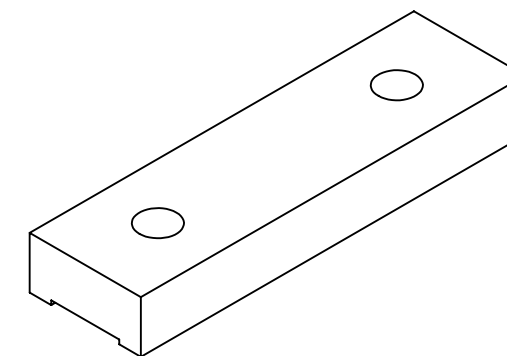
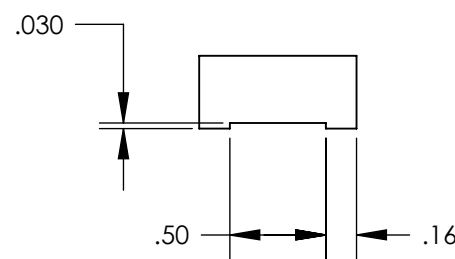
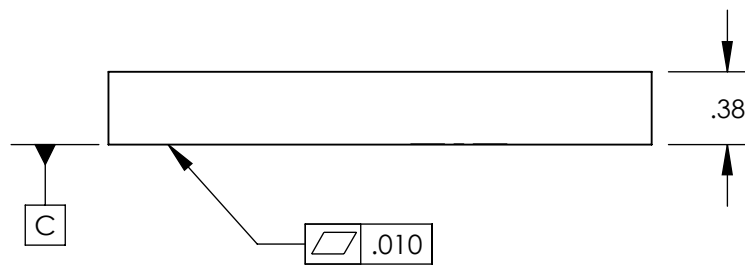
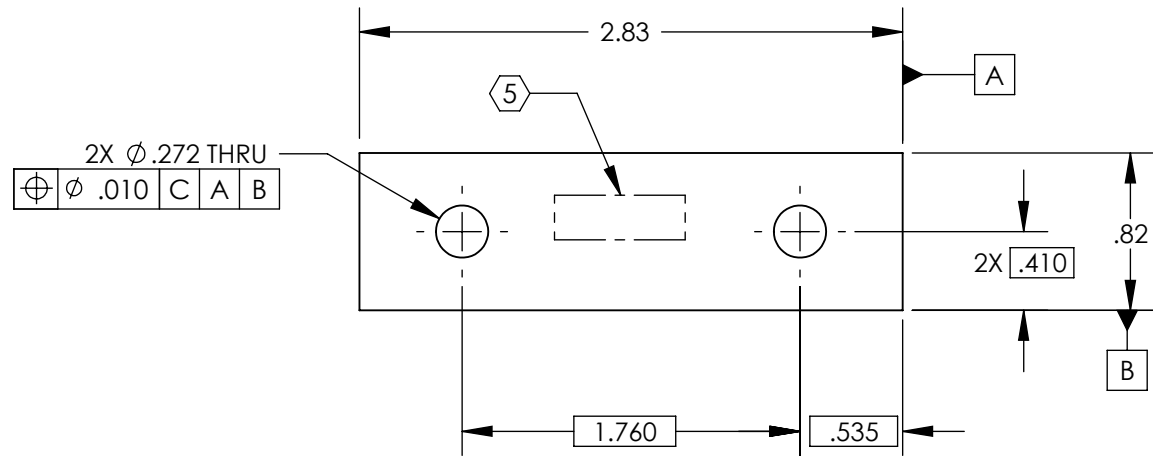
<p>NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)</p> <p>1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.</p>		<p>LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY</p>		<p>PART NAME TFP POLARIZER PLATE ASSY</p>	
<p>DIMENSIONS ARE IN TOLERANCES: .XX ± .XXX ± ANGULAR ± °</p>	<p>MATERIAL --</p>	<p>FINISH -- μinch</p>	<p>SYSTEM ADVANCED LIGO</p>	<p>SUB-SYSTEM AOS</p>	<p>DESIGNER DRAFTER CHECKER APPROVAL</p>
			<p>SIZE DWG. NO. B D0900440</p>	<p>REV. v3</p>	<p>SCALE: 1:1 PROJECTION: SHEET 1 OF 1</p>

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	14 Jul 2009	E0900203	
v2	07 OCT 2010	E1000563	



D0900566_AdlIGO_AOS_D0900570_Upper Blade Clamp_Top, PART PDM REV: X-007, DRAWING PDM REV: X-008

D

C

B

A

D

C

B

A

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .02 .XXX ± .010 ANGULAR ± °				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		UP BLADE CLAMP TOP	
						MATERIAL 6061-T6 Al FINISH 63 μinch NEXT ASSY D0900136	
				DESIGNER		SIZE DWG. NO.	REV.
				DRAFTER	N.Nguyen	B	D0900566
				CHECKER	K. Malland		v2
				APPROVAL	C. Torrie	SCALE: 1:1	PROJECTION:
						SHEET 1 OF 1	

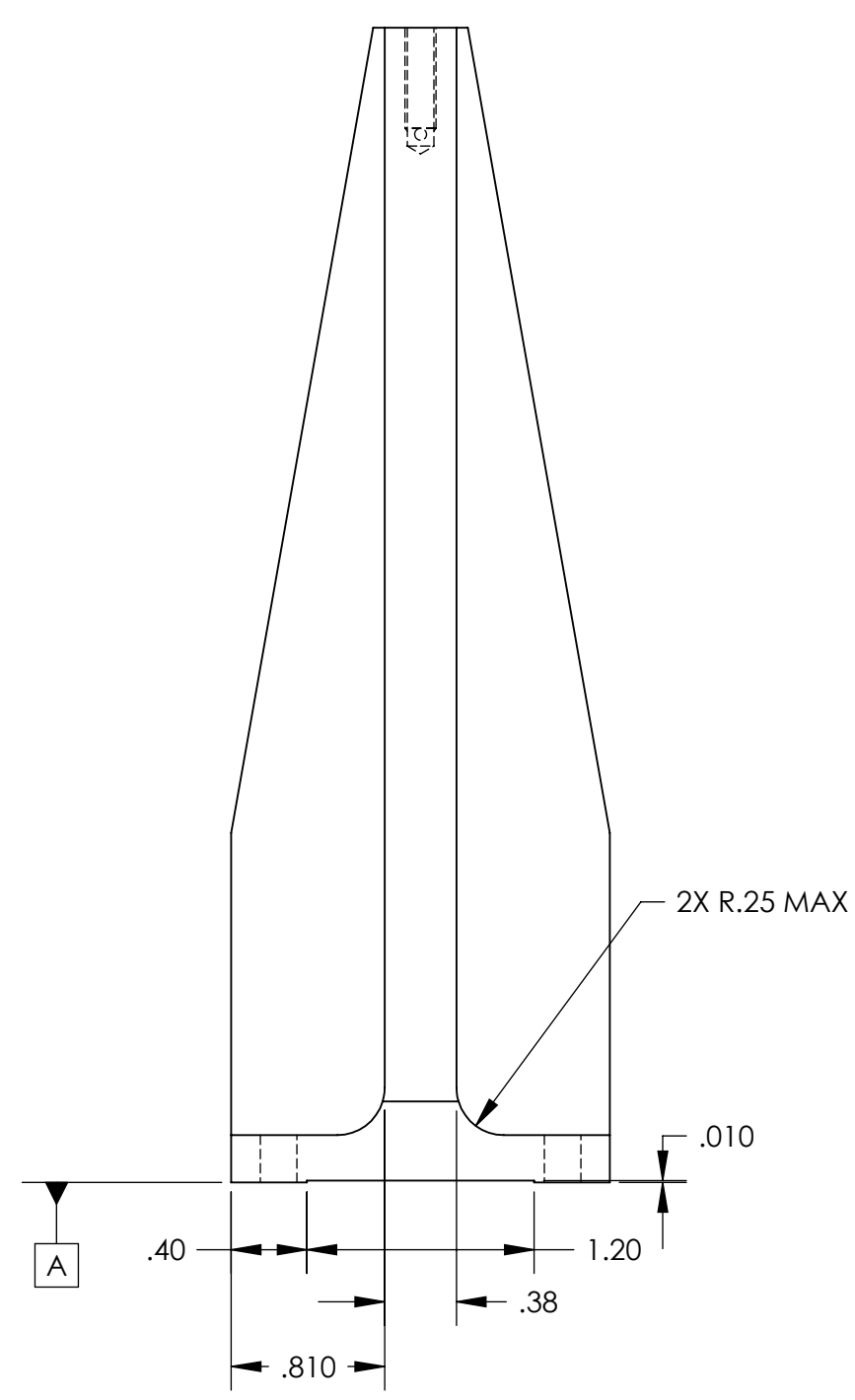
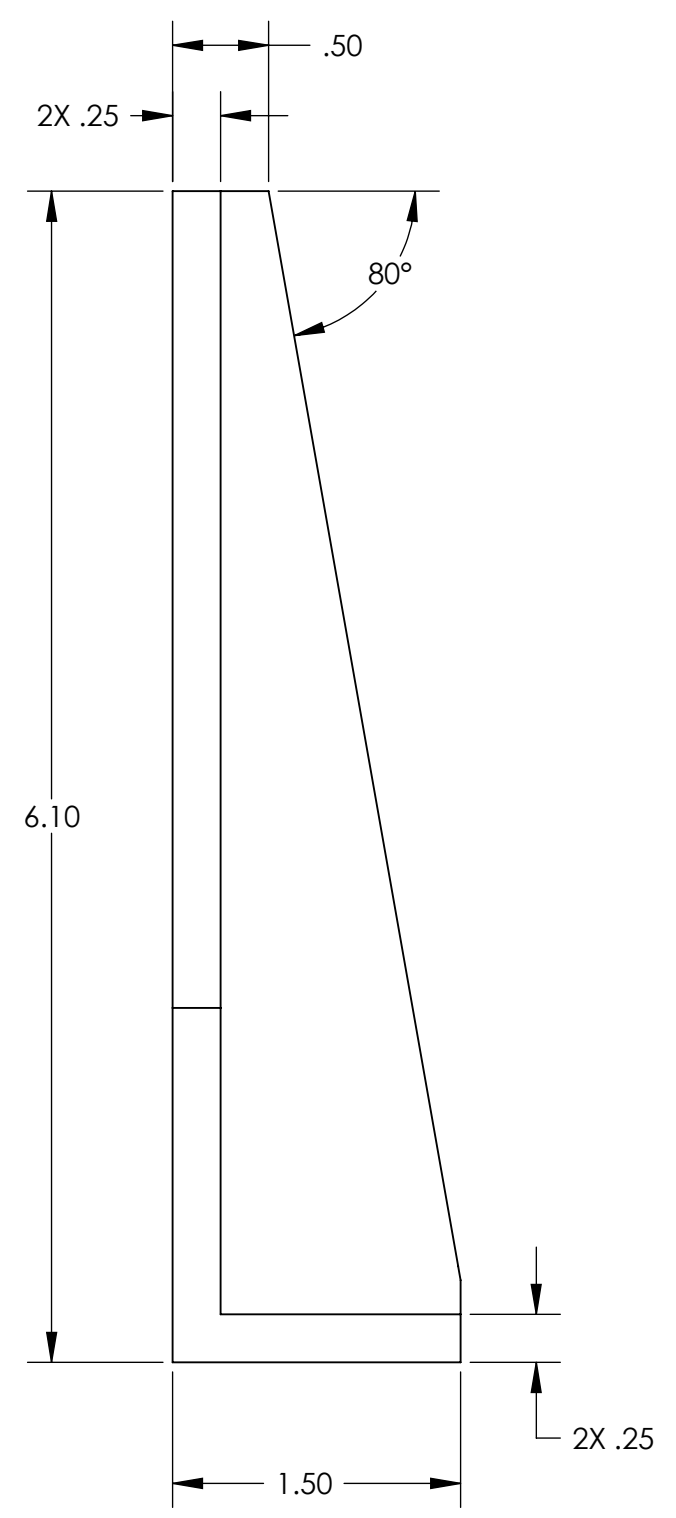
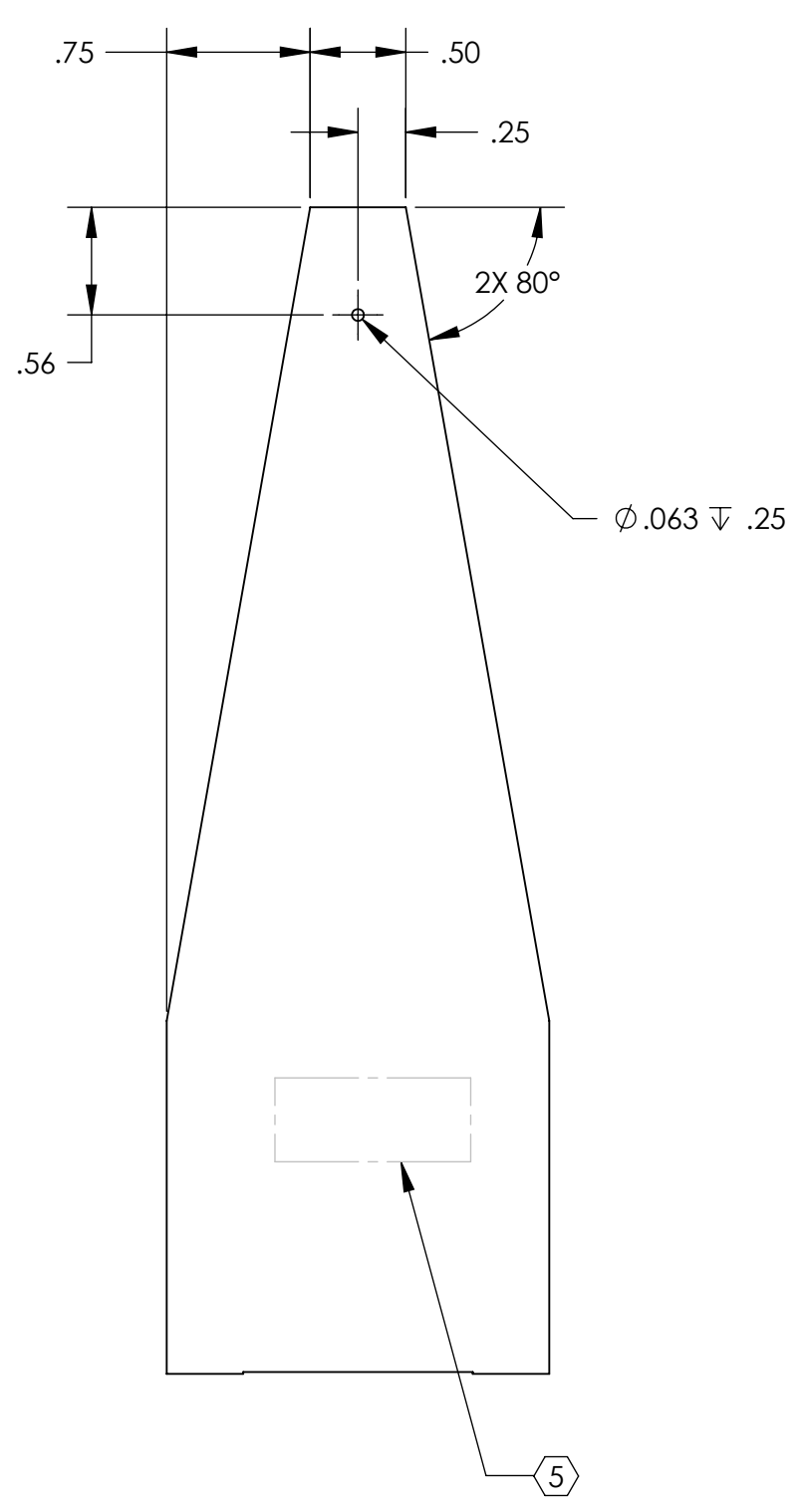
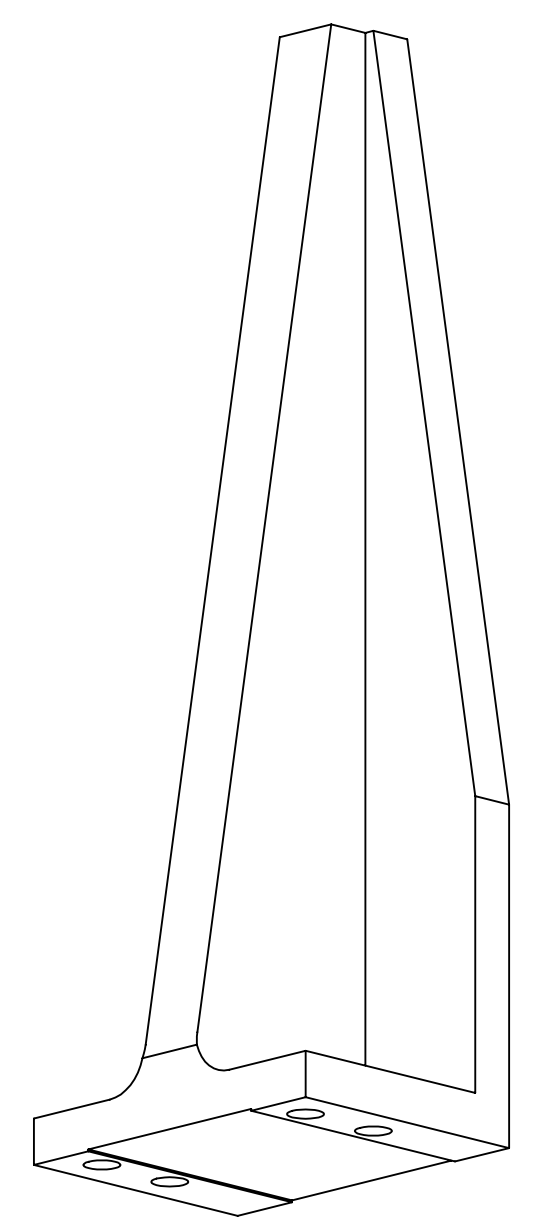
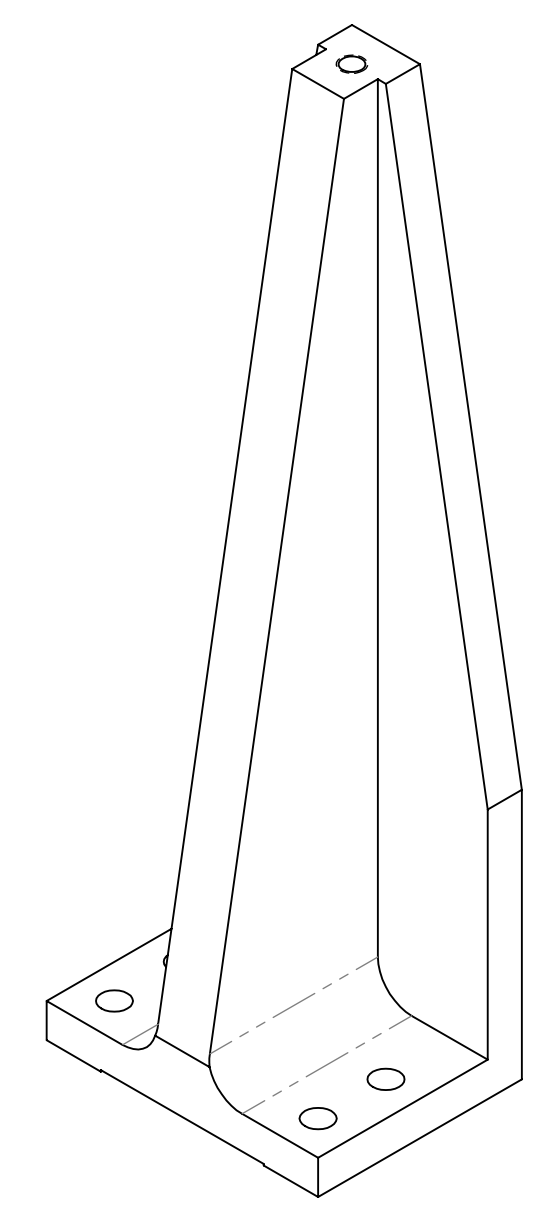
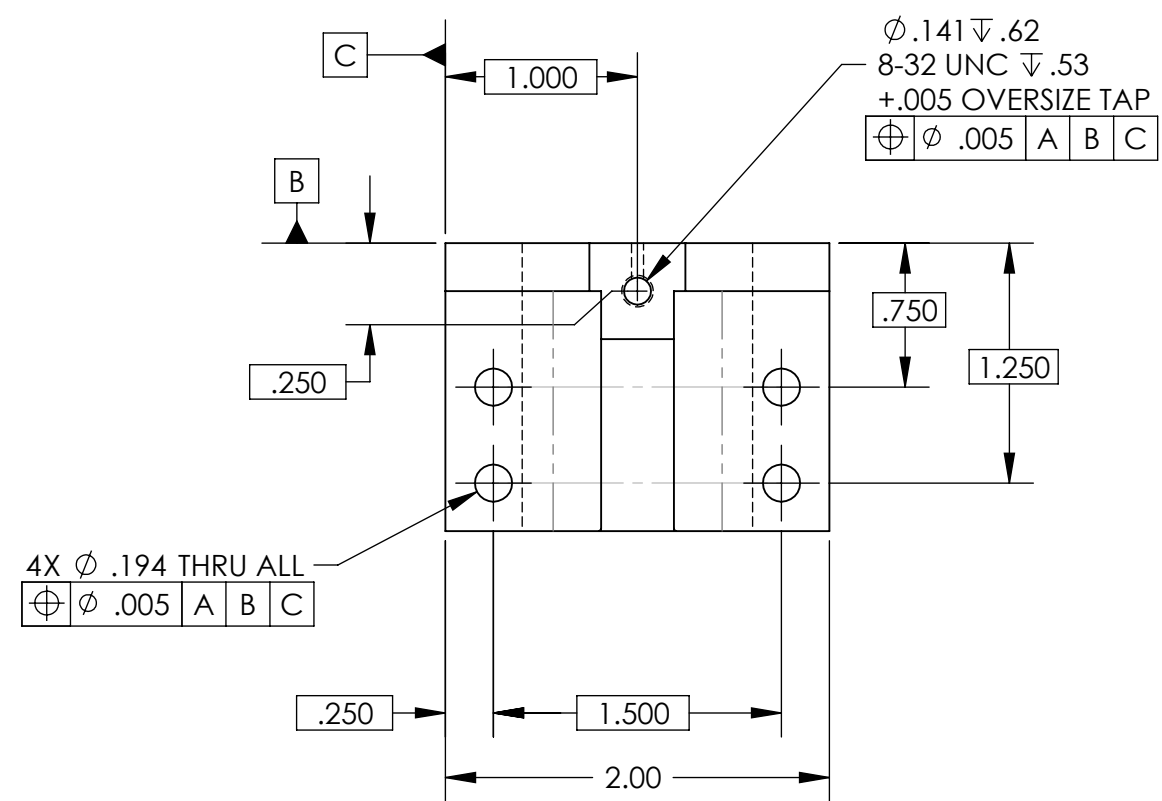
NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	21 JUL 2009	E0900209	-
v2	07 OCT 2010	E1000563	-
v3	28 FEB 2011	E1000563	-



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, R.02 MIN.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410.

MATERIAL: 6061-T6 Al
FINISH: 63 μinch



SYSTEM: ADVANCED LIGO
SUB-SYSTEM: AOS
NEXT ASSY: D0900579

PART NAME

BLADE GUARD RISER

DESIGNER	SIZE	DWG. NO.	REV.
N.Nguyen	c	D0900578	v3
K. MAILAND	SCALE: 1:1	PROJECTION:	SHEET 1 OF 1
C. TORRIE			

DIMENSIONS ARE IN INCHES

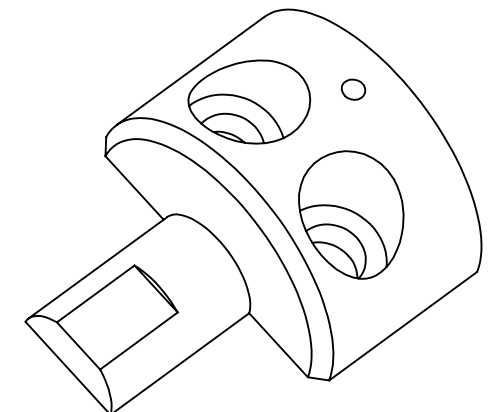
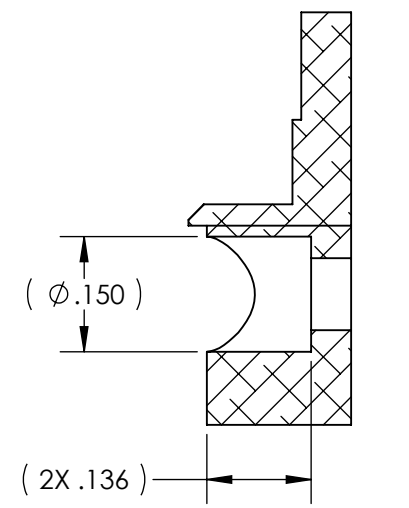
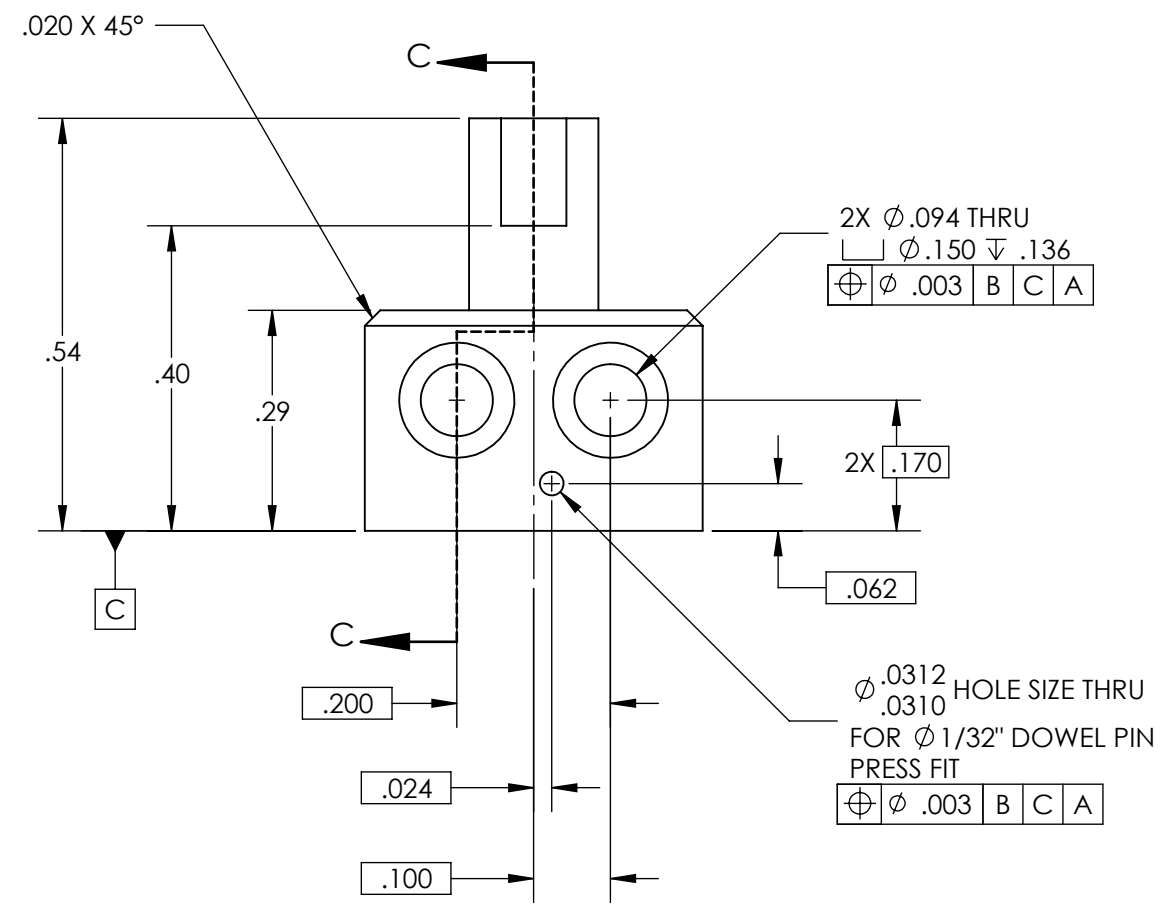
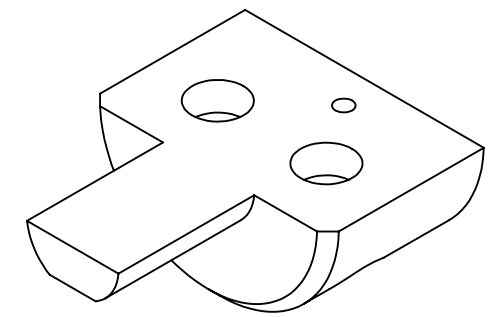
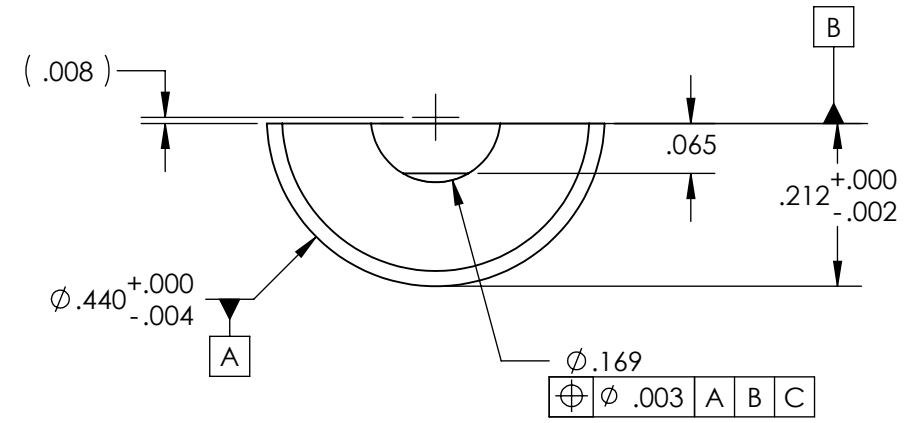
TOLERANCES:
.XX ± .01
.XXX ± .005

ANGULAR ± 0.5°

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

REV.	DATE	DCN #	DRAWING TREE #
v1	01 APR 2009	E0900244	
v2	07 OCT 2010	E1000563	

D 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.



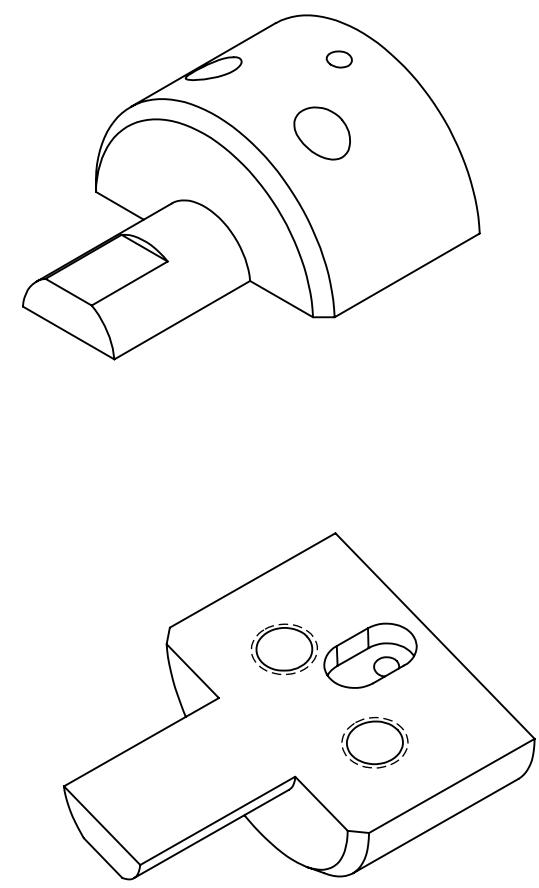
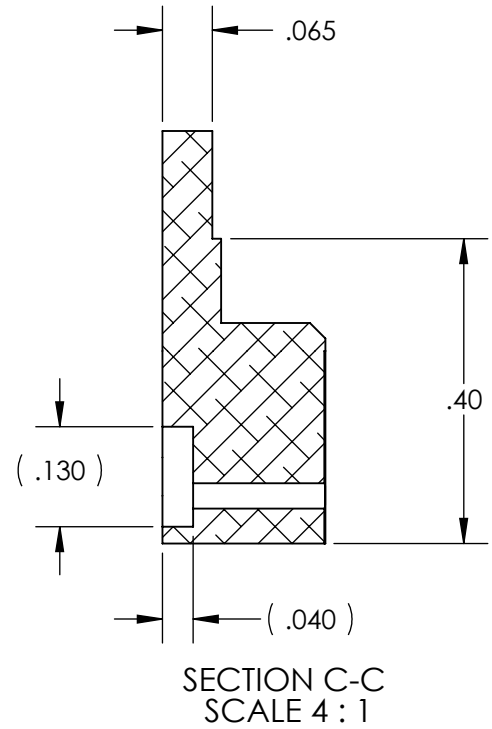
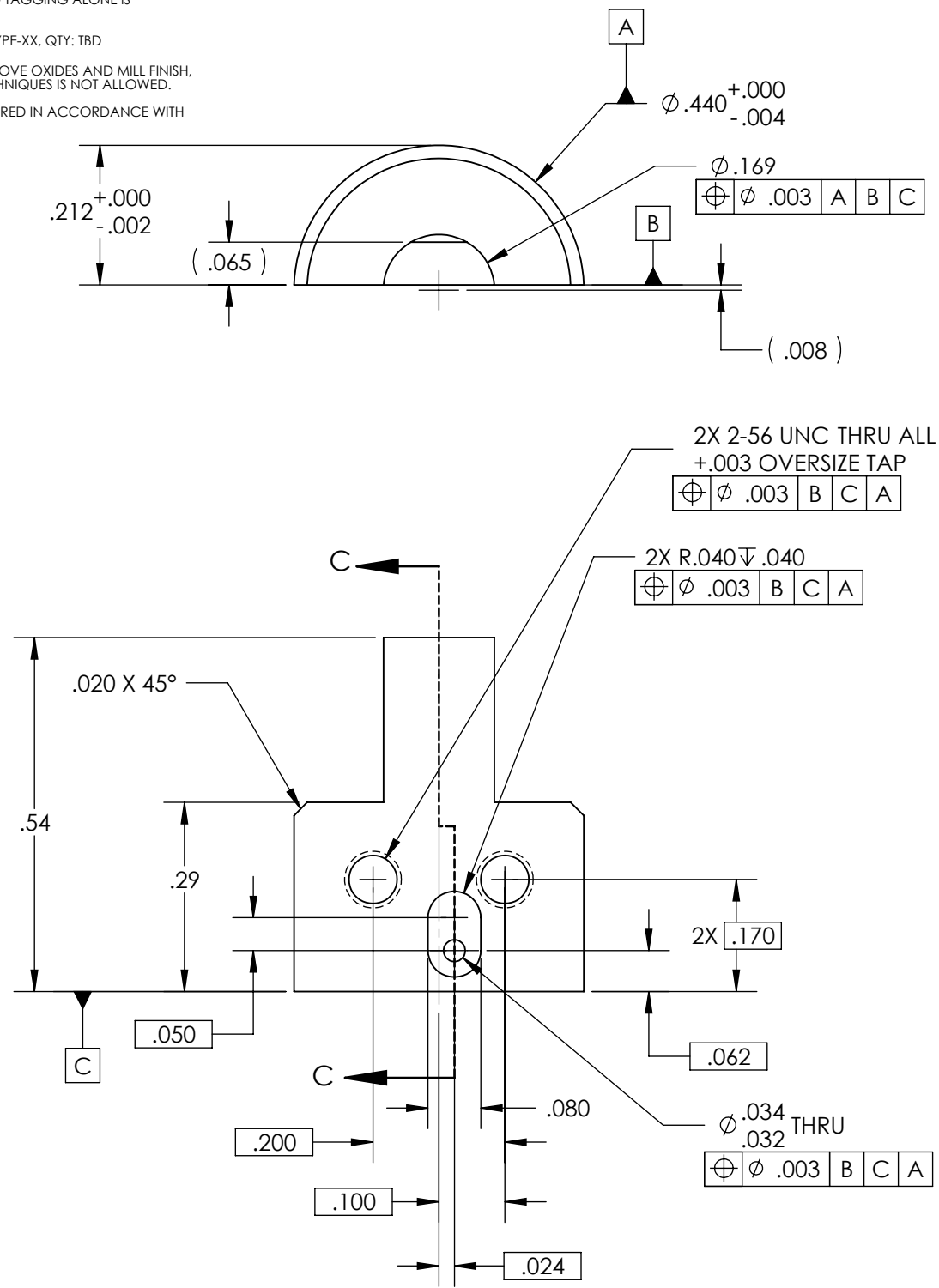
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .005 .XXX ± .002 ANGULAR ± 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		MUSIC WIRE SPLIT CLAMP 1	
MATERIAL 304, 316 OR 302 SSSL		FINISH 63 μinch		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
NEXT ASSY D0900586				DESIGNER N.Nguyen 18 Aug 2009		SIZE DWG. NO. B D0900582	
				DRAFTER M. Smith 21 Aug 2009		REV. v2	
				CHECKER M. Smith 21 Aug 2009		SCALE: 1:1 PROJECTION:	
				APPROVAL		SHEET 1 OF 1	

D0900582_AdlIGO_AOS_D0900586_Music Wire Split Clamp 1, PART PDM REV: X-015, DRAWING PDM REV: X-013

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

REV.	DATE	DCN #	DRAWING TREE #
v1	01 APR 2009	E0900244	
v2	07 OCT 2010	E1000563	
v3	20 DEC 2010	E1000563	
v4	28 FEB2011	E1000563	

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.



D0900583_AdlIGO_AOS_D0900586_Music Wire Split Clamp 2, PART PDM REV: X-011, DRAWING PDM REV: X-013

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .005 .XXX ± .002 ANGULAR ± 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		MUSIC WIRE SPLIT CLAMP 2	
MATERIAL 304, 316 OR 302 SSSL		FINISH 63 μinch		NEXT ASSY D0900586		DESIGNER N. Nguyen 18 Aug 2009 DRAFTER M. Smith 21 Aug 2009 CHECKER APPROVAL	
				SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
				SIZE DWG. NO. B D0900583		REV. v4	
				SCALE: 1:1 PROJECTION:		SHEET 1 OF 1	

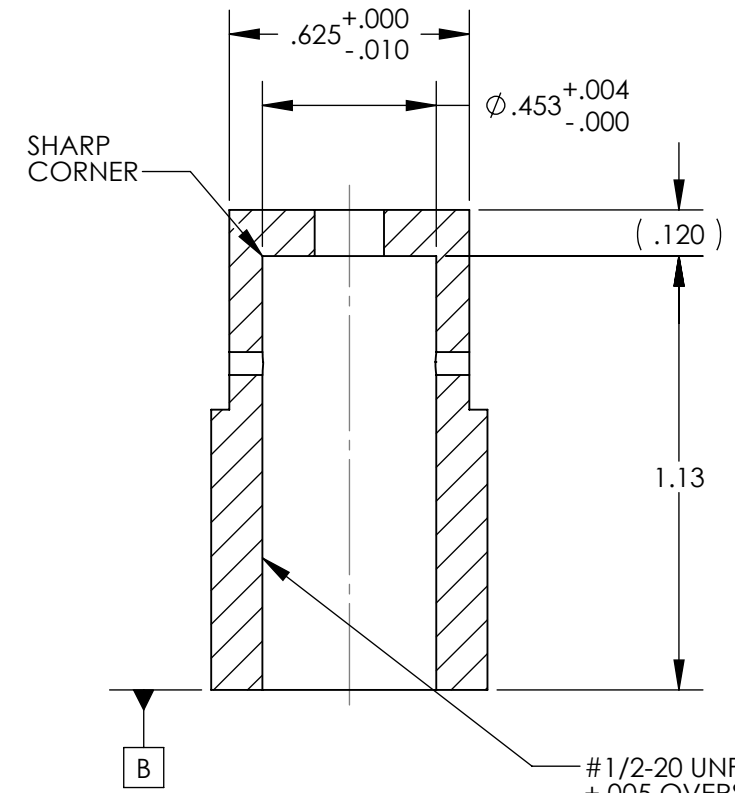
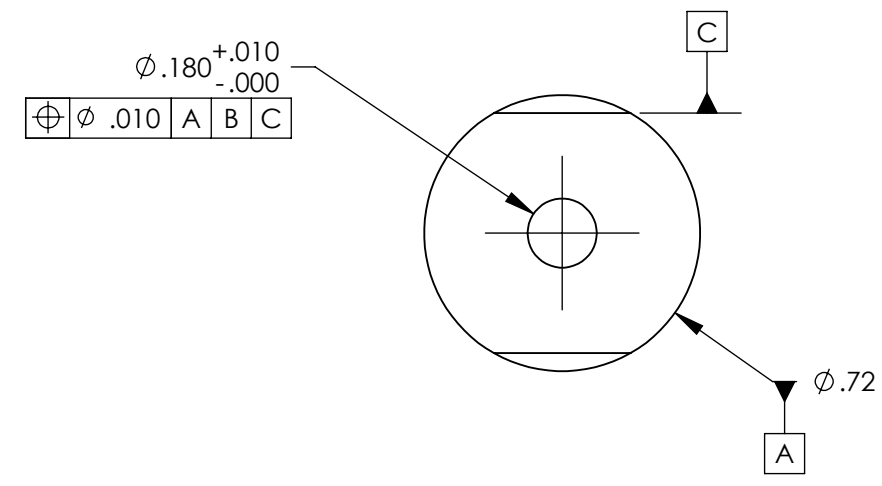
D0900588_AdLIGO_AOS_FID0900586_Wire Adjustable Adapter, PART PDM REV: X-003, DRAWING PDM REV: X-014

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

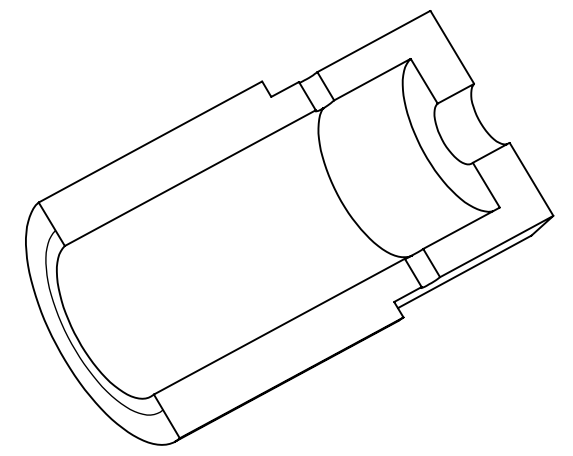
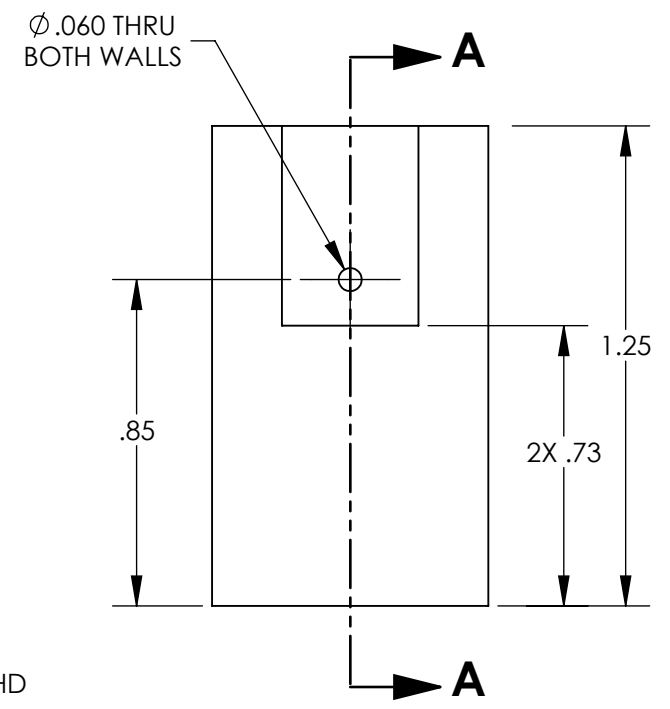
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	01 APR 2009	E0900244	-
v2	07 OCT 2010	E1000563	-
v3	28 FEB 2011	E1000563	-



SECTION A-A
SCALE 2:1

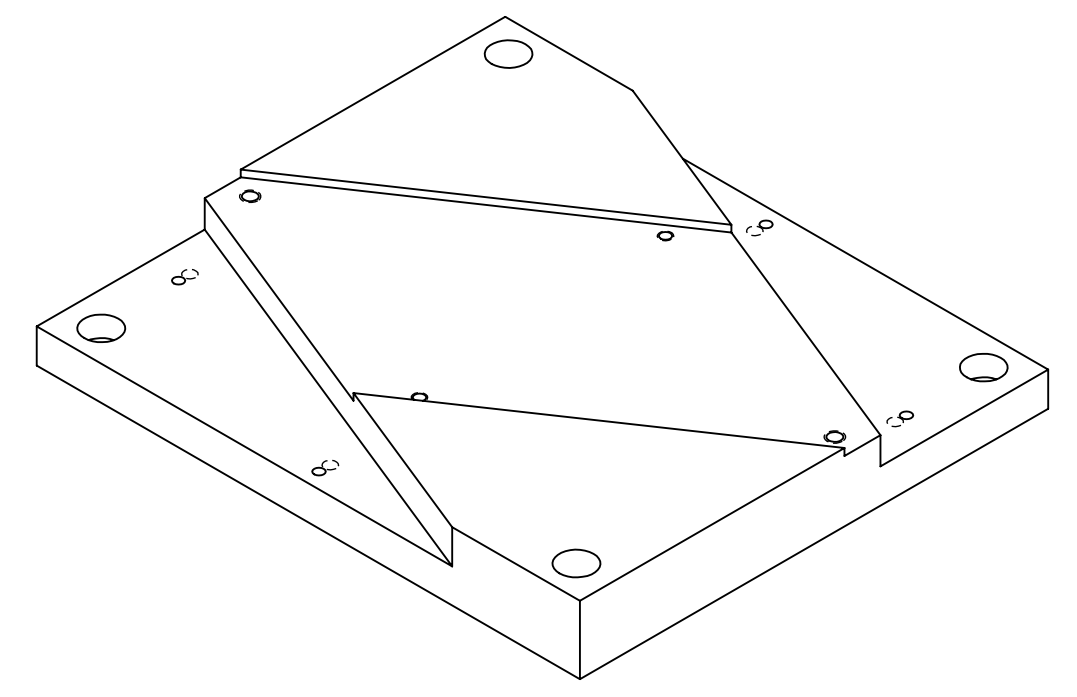
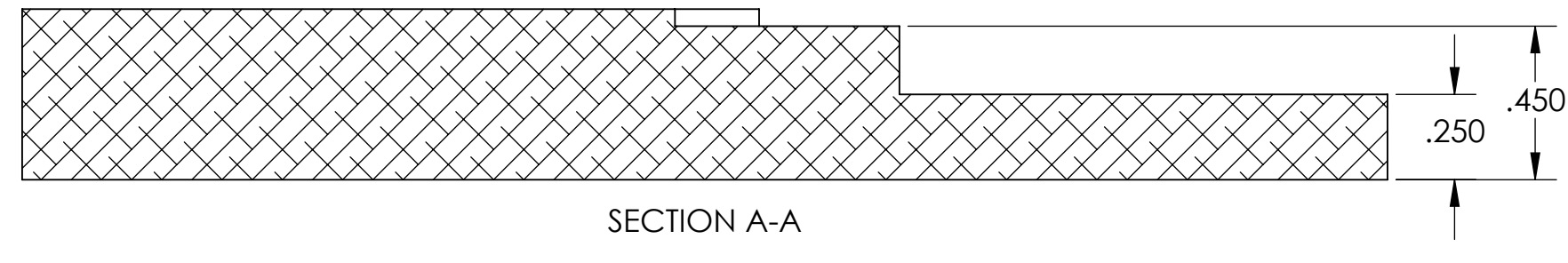


NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± .5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		WIRE ADJUSTABLE ADAPTER	
MATERIAL 6061-T6 Al				FINISH 63 μinch		SYSTEM ADVANCED LIGO SUB-SYSTEM AOS	
NEXT ASSY FARADAY ISOLATOR				DESIGNER N.Nguyen 12 May 09		SIZE DWG. NO. B D0900588	
				DRAFTER		REV. v3	
				CHECKER		SCALE: 1:1 PROJECTION:	
				APPROVAL		SHEET 1 OF 1	

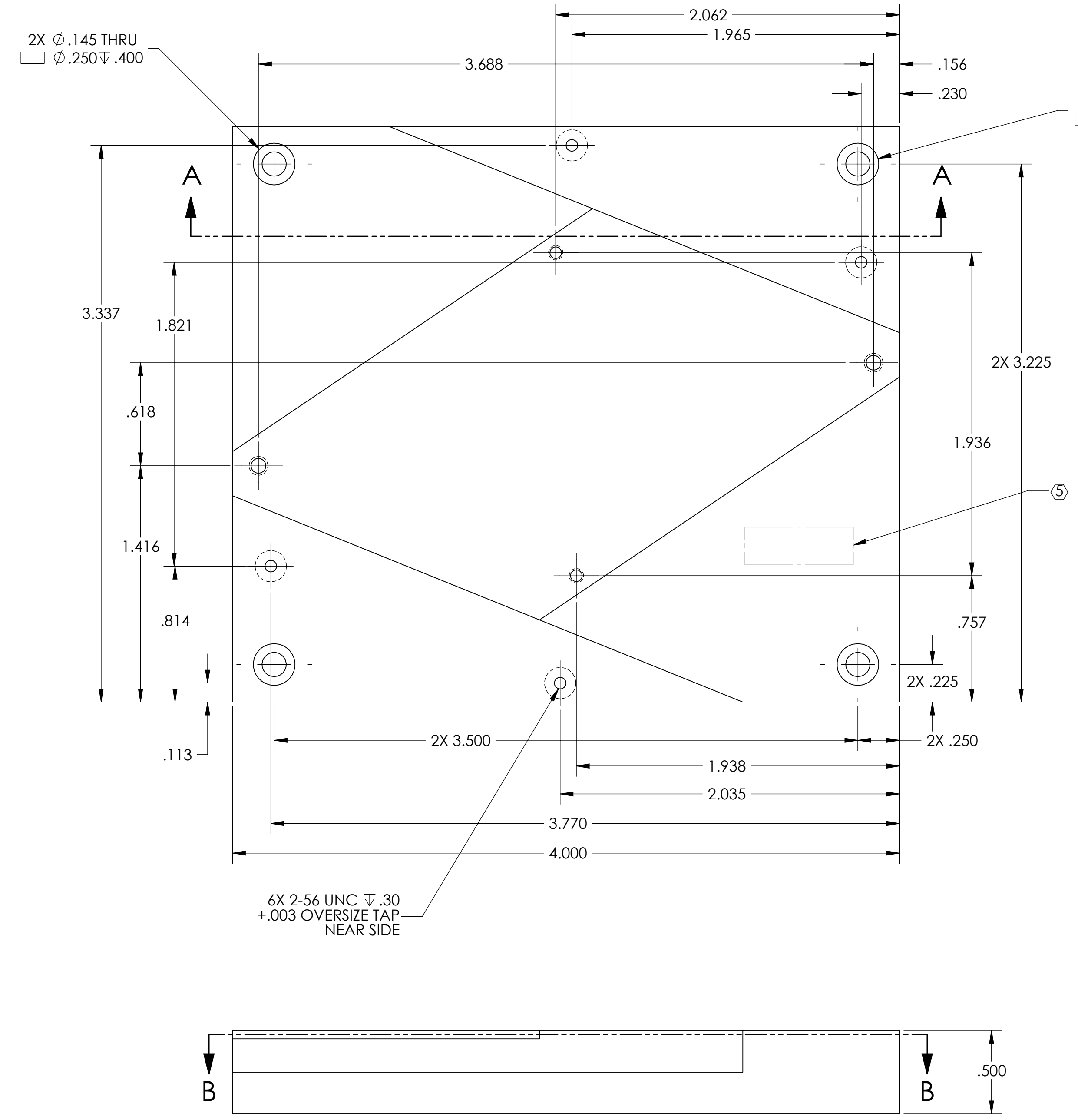
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR TYPE IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 0.547 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	
v2	28 FEB 2011	E1000563	

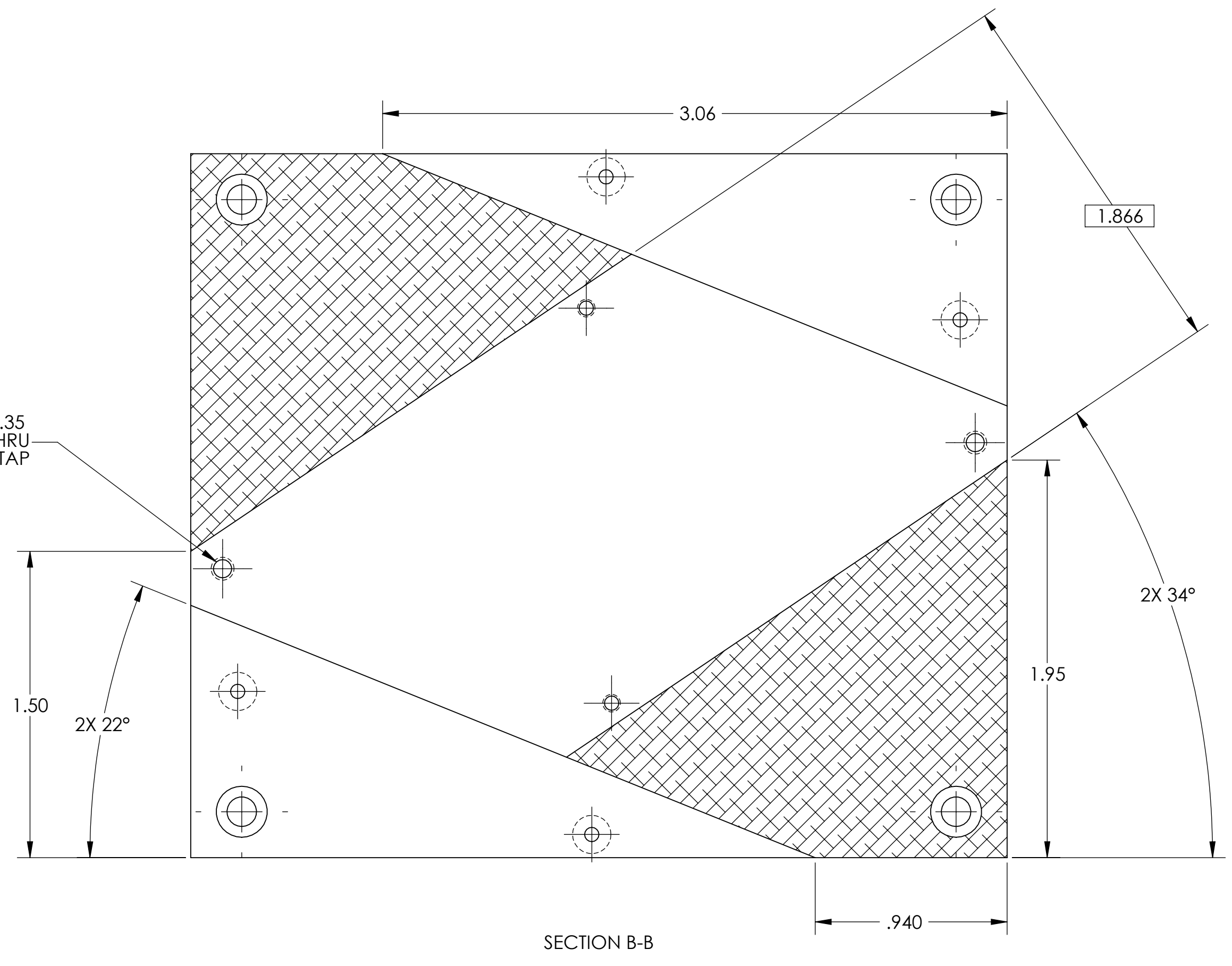


GENERAL VIEW FOR REFERENCE ONLY
NO SCALE



2X Ø.145 THRU
Ø.250 ±.150

2X #4-40 UNC ±.35
DRILL THRU
+.005 OVERSIZE TAP



DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± 0.5°

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)
 1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES, R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL: 6061-T6 Al
 FINISH: 63 μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO
 SUB-SYSTEM: AOS

NEXT ASSY: D0900614

PART NAME: PRISM MOUNT BASE_LH

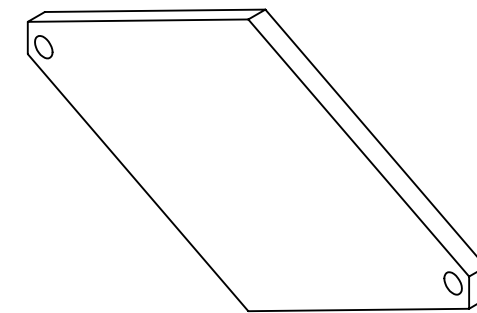
DESIGNER	TQ. NGUYEN	21 JUL 2010	SIZE	DWG. NO.	REV.
DRAFTER	TQ. NGUYEN	26 AUG 2010	D	D0900616	v2
CHECKER	M. SMITH		SCALE: 2:1	PROJECTION:	SHEET 1 OF 1
APPROVAL	D. COYNE				

D0900618_dLIGO_AOS_D0900614_Faraday Isolator Prism Clamp, PART PDM REV: X-003, DRAWING PDM REV: X-006

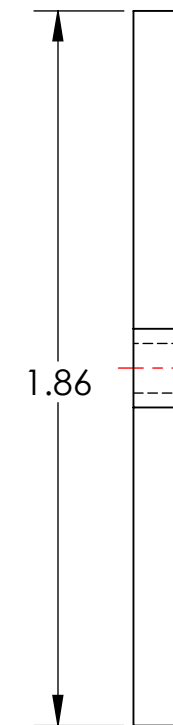
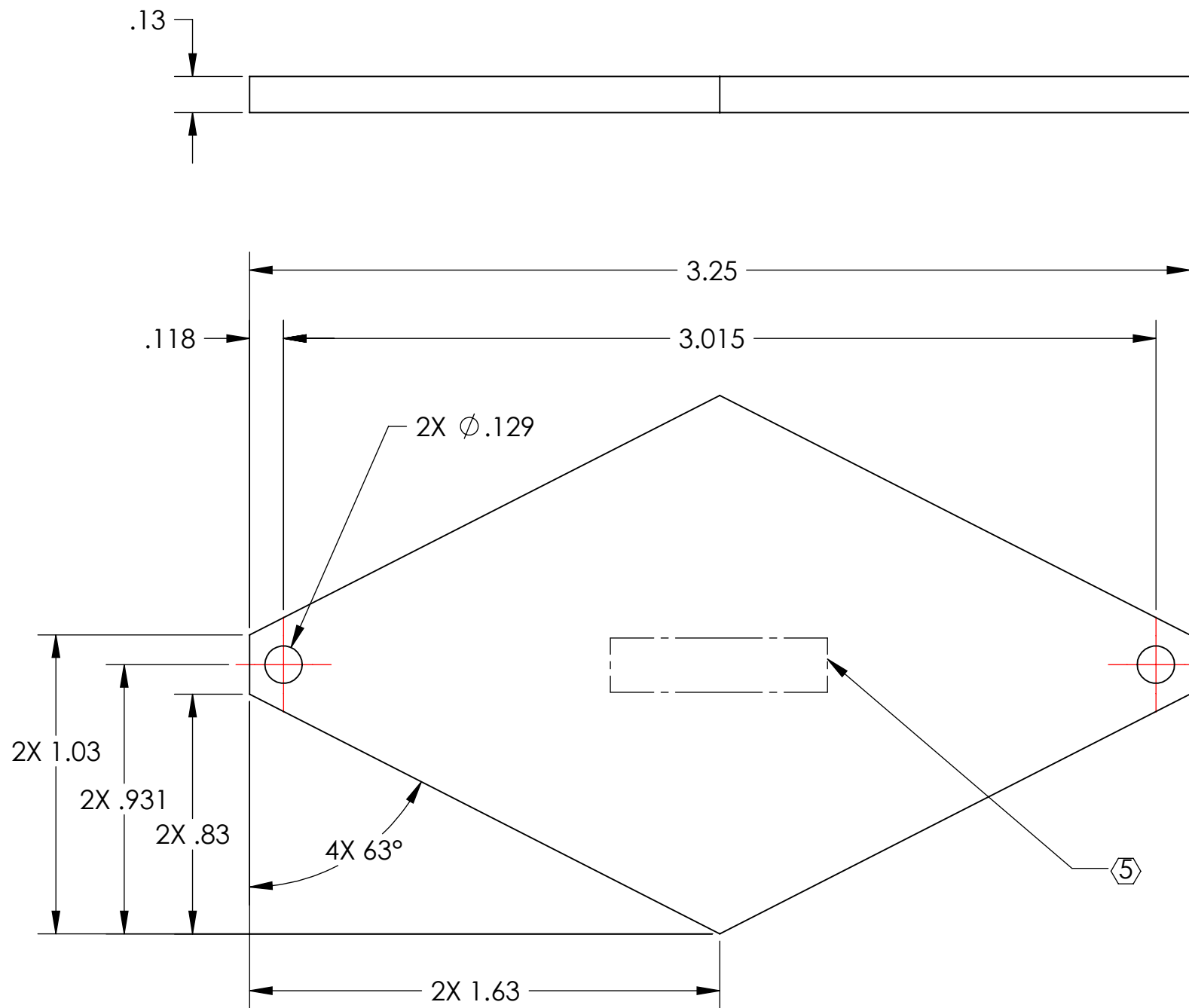
NOTES CONTINUED:
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 0.041LB.
7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-



GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX $\pm .01$
 .XXX $\pm .005$
 ANGULAR $\pm 0.5^\circ$

1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES, R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL: 6061-T6 Al
 FINISH: 63 μ inch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO
 SUB-SYSTEM: AOS
 NEXT ASSY: D0900615-D0900614

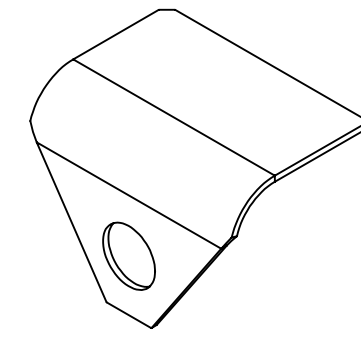
PART NAME		OPTICAL PRISM TOP PLATE	
DESIGNER	TQ. NGUYEN	12 JUL 2010	SIZE DWG. NO.
DRAFTER	TQ. NGUYEN	27 AUG 2010	B
CHECKER	M. SMITH		D0900618
APPROVAL	D. COYNE		REV. v1
SCALE: 2:1		PROJECTION:	SHEET 1 OF 1

D0900619_atLIGO_AOS_D0900614_Faraday Isolator SPRING Clip, PART PDM REV: X-009, DRAWING PDM REV: X-006

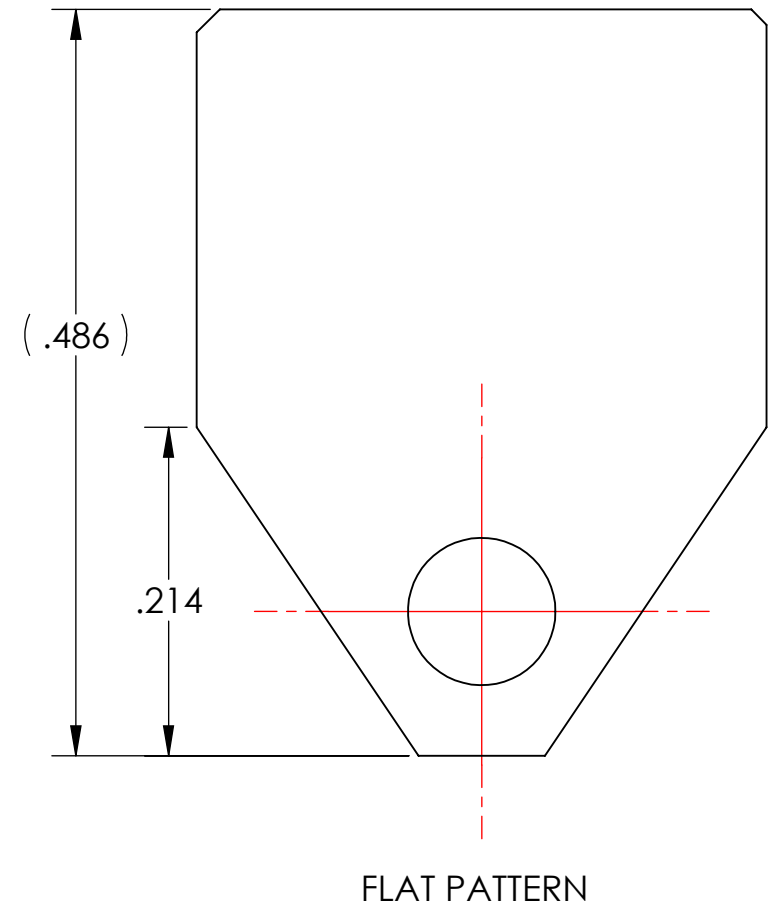
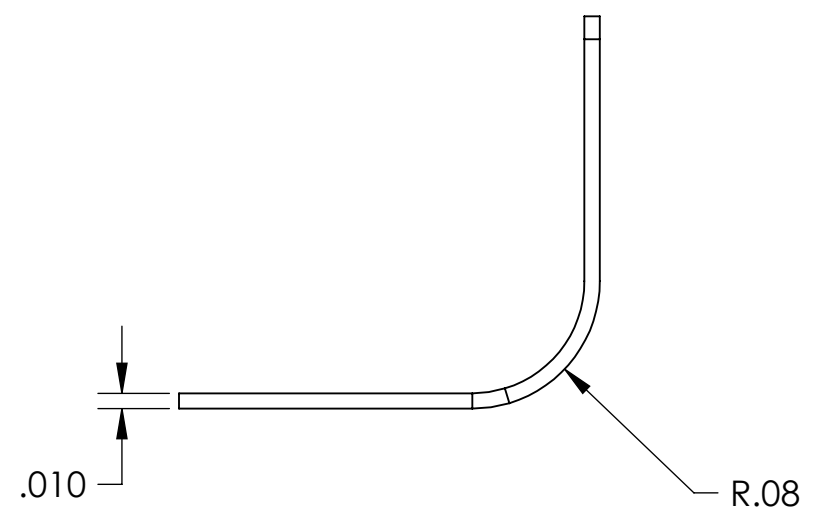
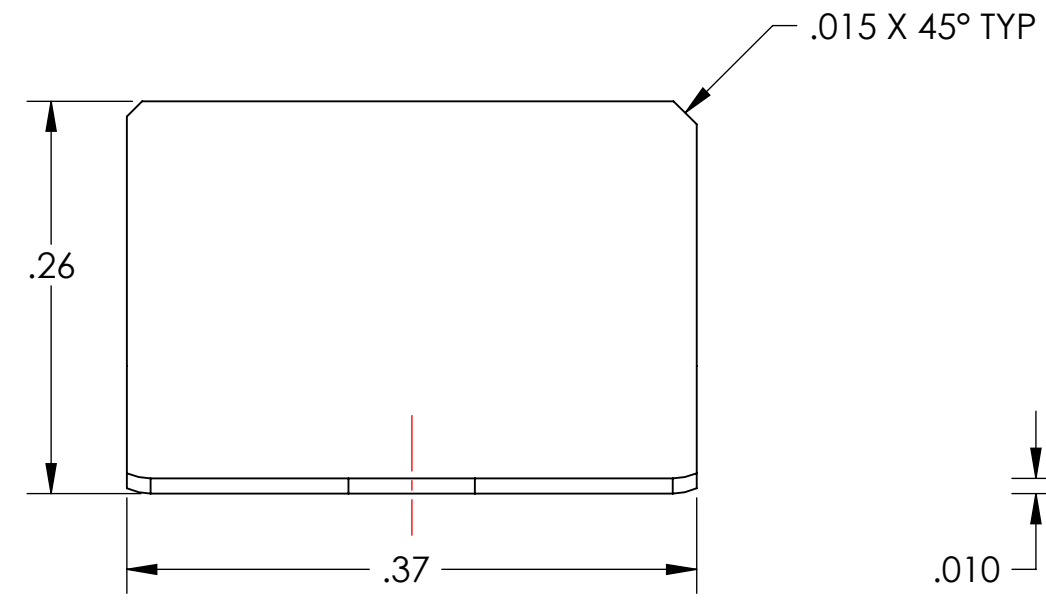
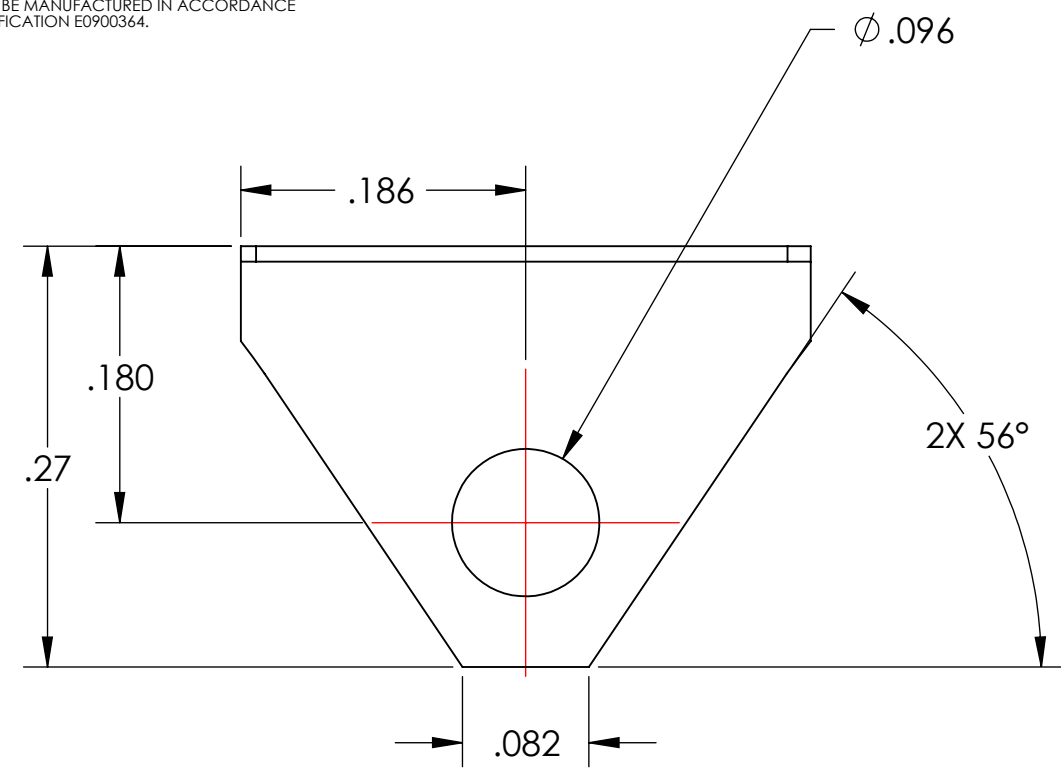
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

6. APPROXIMATE WEIGHT = 0.0004 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-



GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE



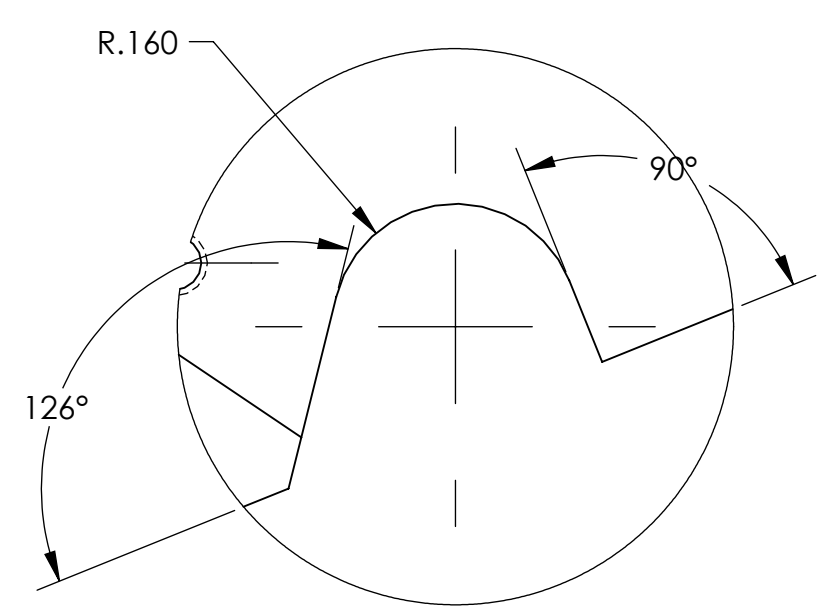
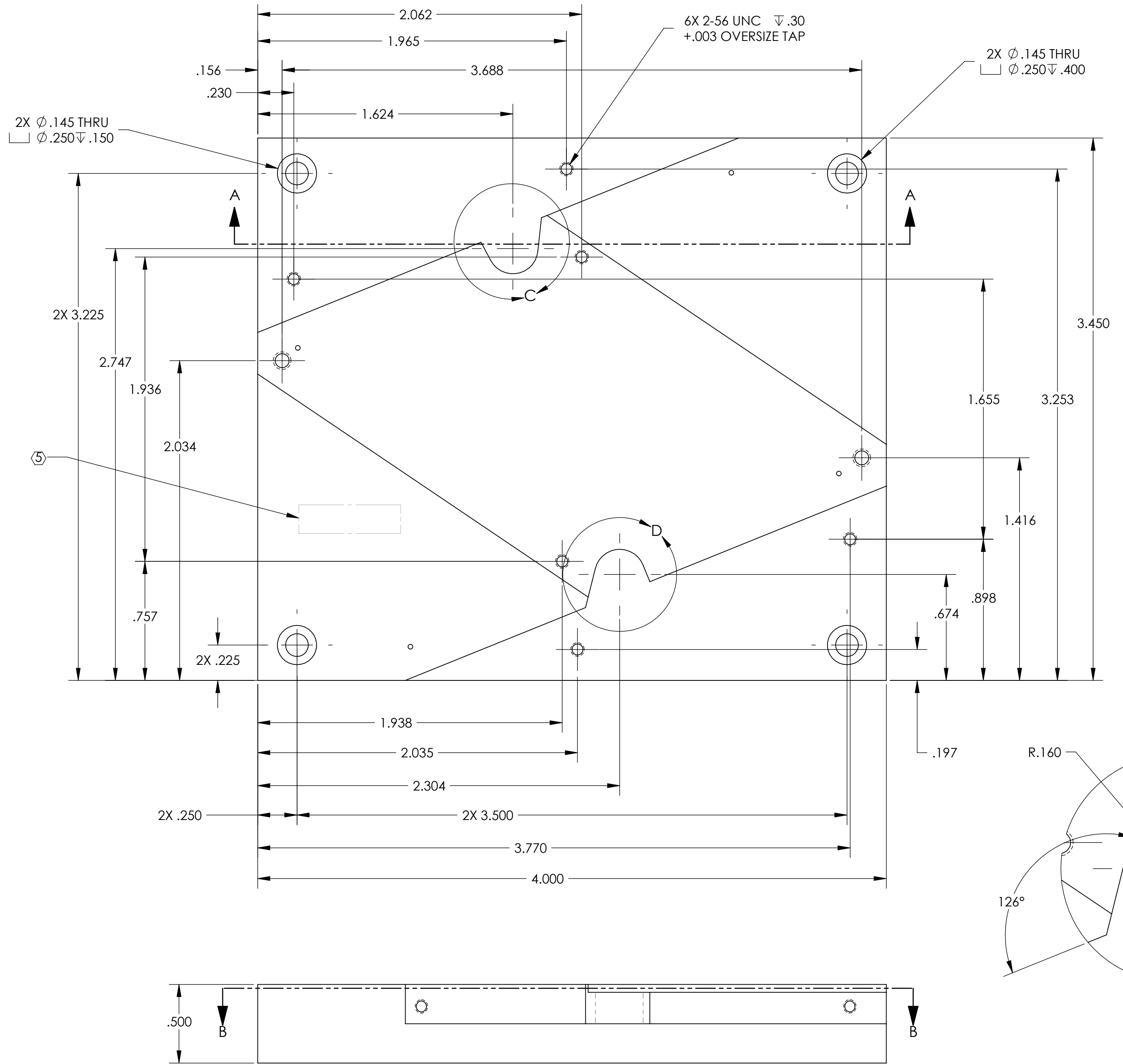
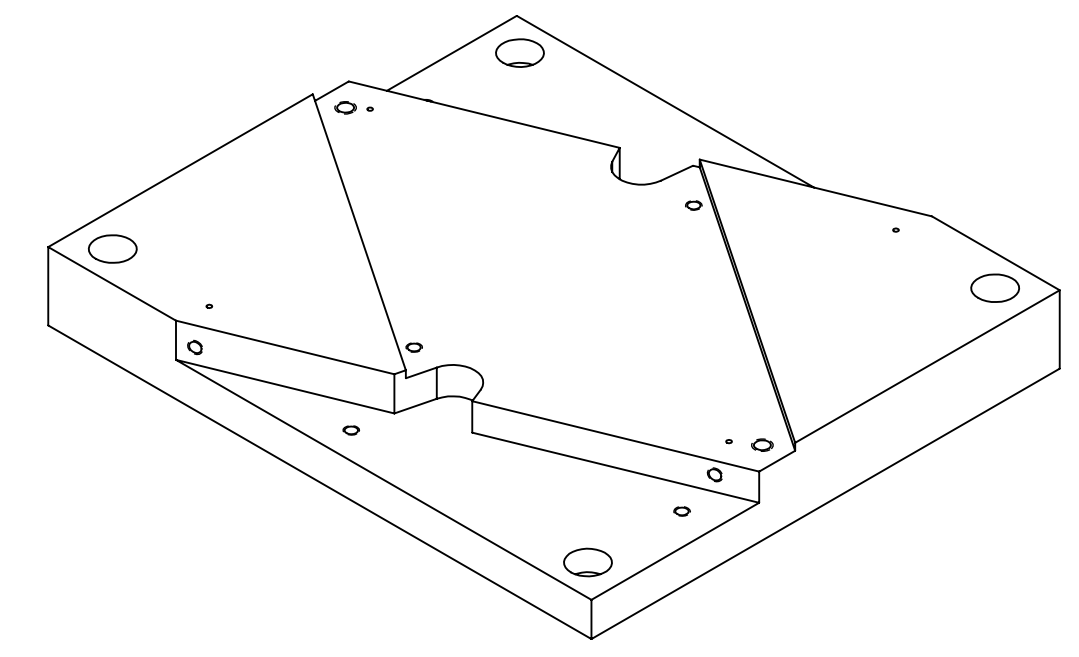
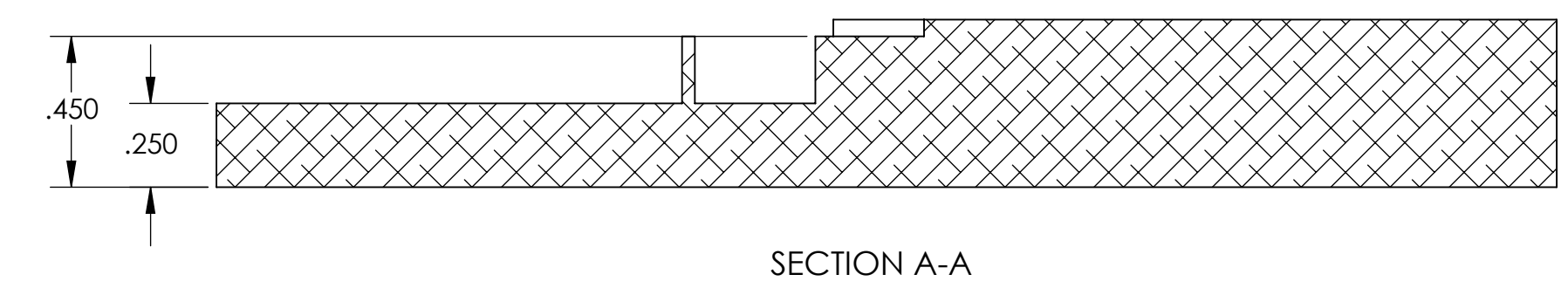
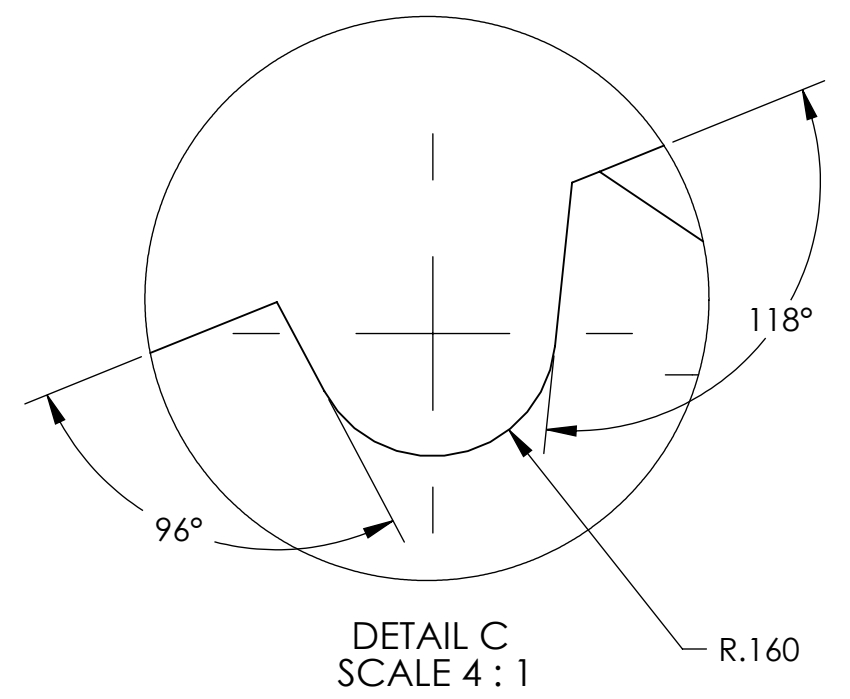
FLAT PATTERN

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		CLIP	
						MATERIAL 304 SSSL FINISH 63 μinch	
SYSTEM ADVANCED LIGO SUB-SYSTEM AOS				DESIGNER TQ. NGUYEN 12 JUL 2010 DRAFTER TQ. NGUYEN 23 AUG 2010		SIZE DWG. NO. B D0900619 REV. v1	
NEXT ASSY D0900614-D0900615				CHECKER M. SMITH APPROVAL D. COYNE		SCALE: 8:1 PROJECTION: SHEET 1 OF 1	

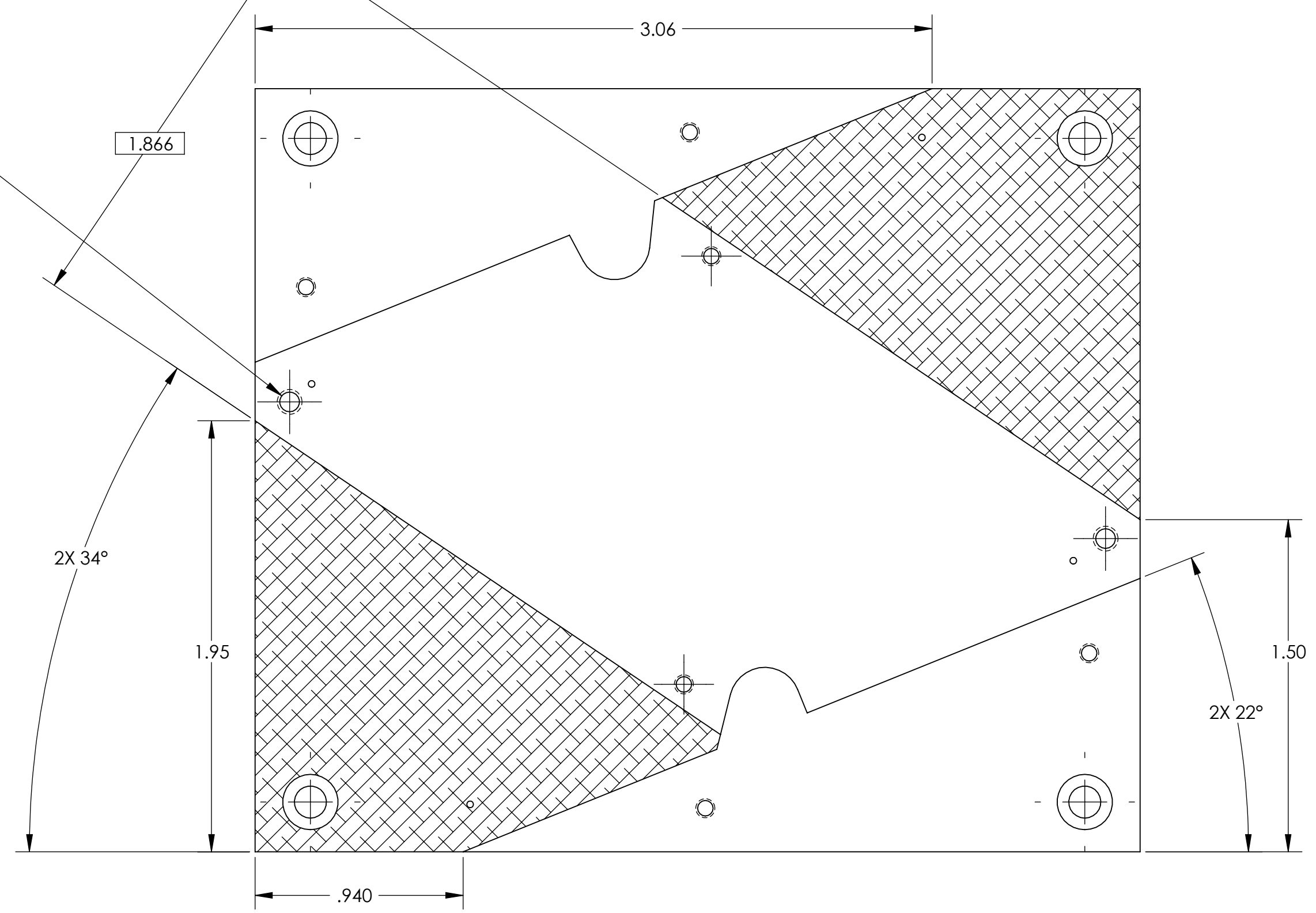
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR 'TYPE' IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 0.547 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	E1000474
v2	16 FEB 2011	E1000563	E1000474
v3	28 FEB 2011	E1000563	E1000474



2X #4-40 UNC ∇ .35
DRILL THRU
+.005 OVERSIZE TAP



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN INCHES	
TOLERANCES: .XX \pm .01 .XXX \pm .005	
ANGULAR \pm 0.5°	
MATERIAL	FINISH
6061-T6 Al	63 μ inch

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SYSTEM	SUB-SYSTEM
ADVANCED LIGO	AOS
NEXT ASSY	
D0900615	

PART NAME				PRISM MOUNT BASE_RH			
DESIGNER	TQ. NGUYEN	16 JUL 2010	SIZE	DWG. NO.	REV.		
DRAFTER	TQ. NGUYEN	20 AUG 2010	D	D0900620	v3		
CHECKER	M. SMITH		SCALE: 2:1	PROJECTION:	SHEET 1 OF 2		
APPROVAL	D. COYNE						

D0900620.dwg, AOS, D0900615, Part PDM REV: X-015, DRAWING PDM REV: X-023

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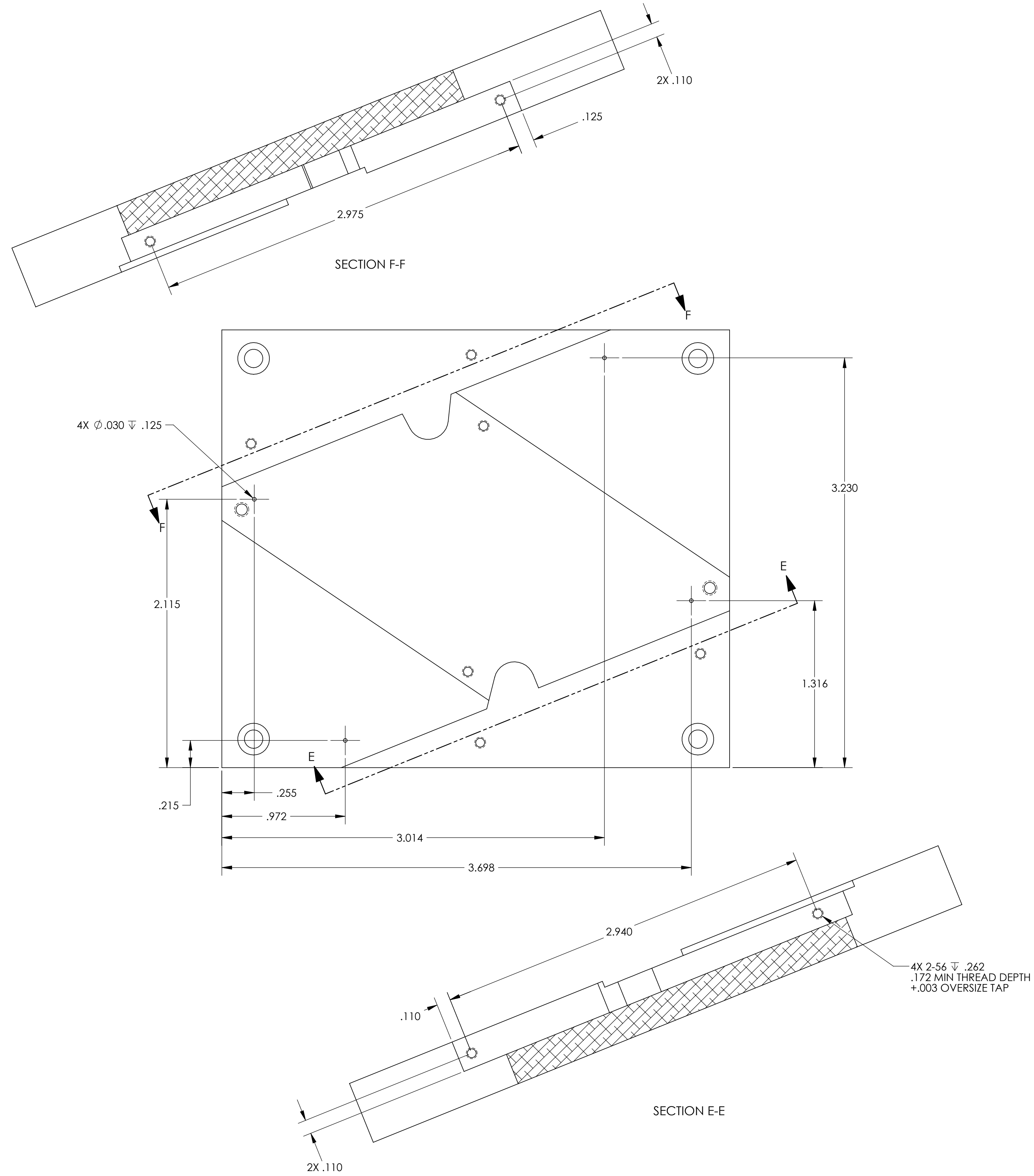
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LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE DWG. NO.	REV.
D D0900620	v3
SCALE: 2:1	PROJECTION:  SHEET 2 OF 2

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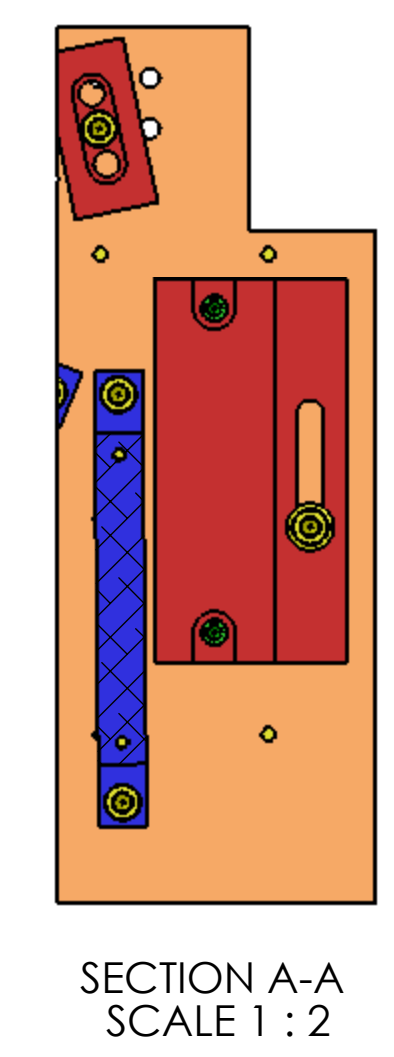
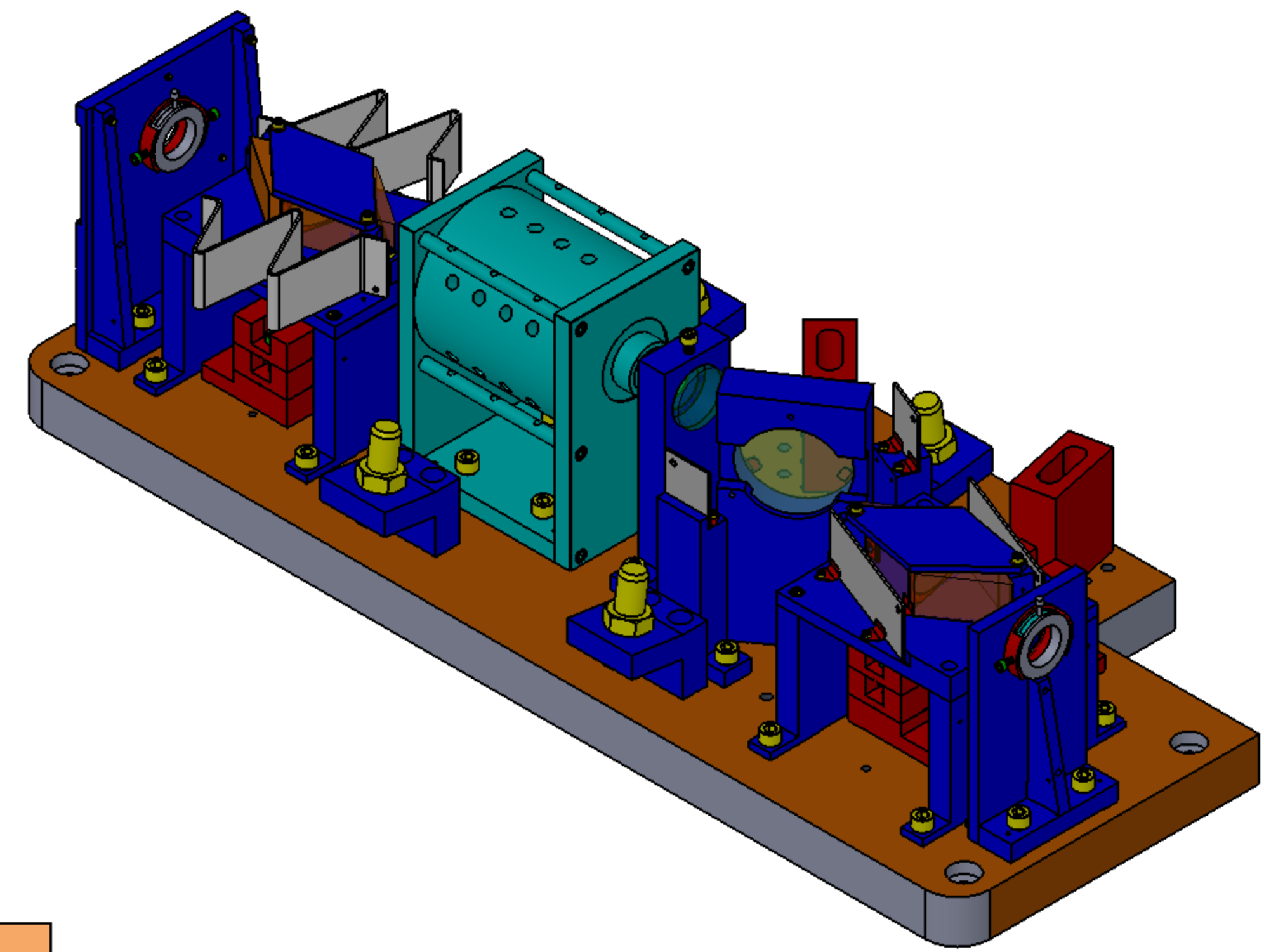
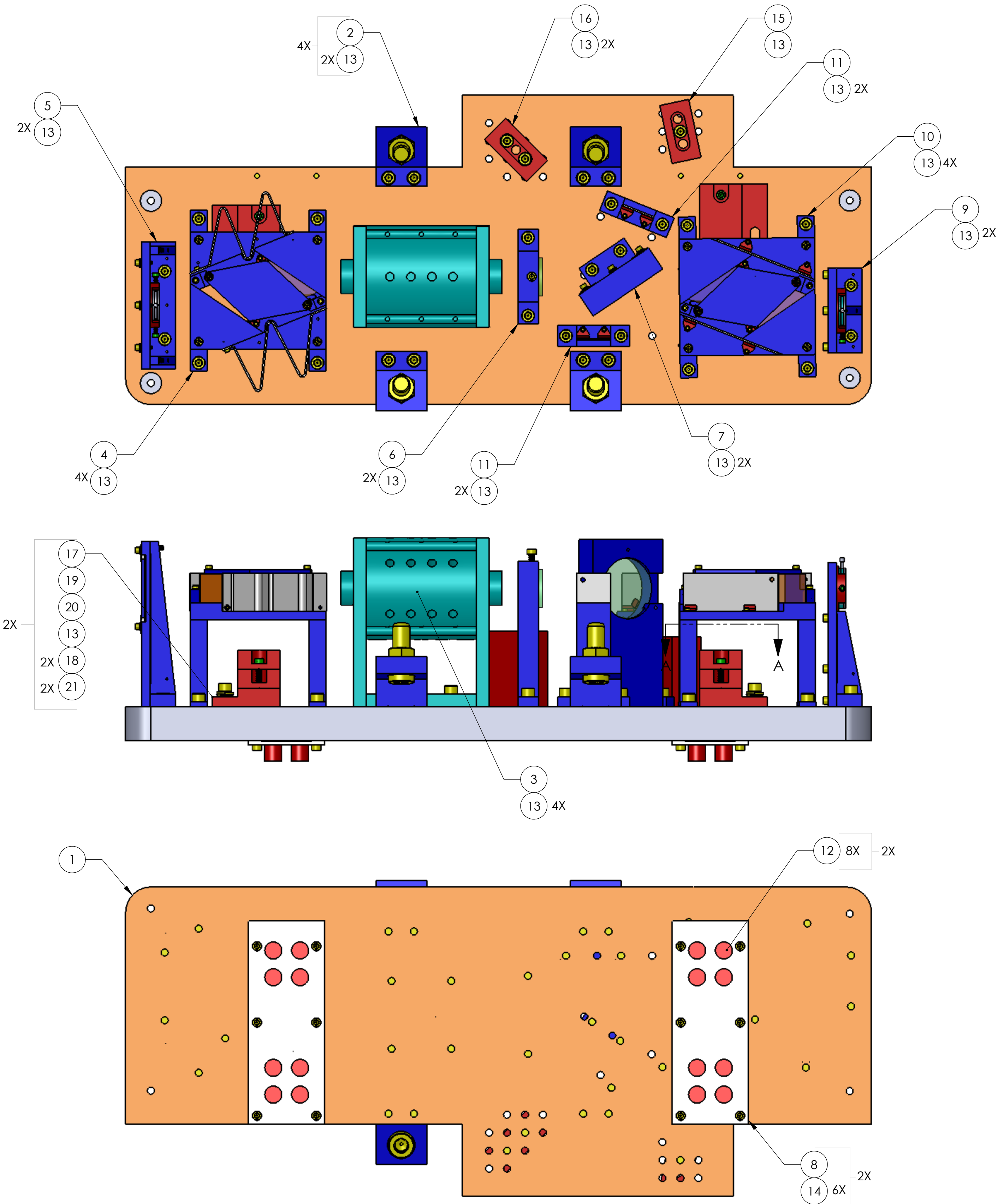
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D:\D0900620.dwg ACIS D:\D0900615_Faraday Isolator Prism Mount Base RH.PART.PDM.REV.X-015.DRAWING.PDM.REV.X-023

REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	-
v2	02 MAR 2011	E1000563	-
v3	05 MAR 2011	E1000563	-



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.	SPARE	TOTAL
21	C-816-NA	8-32 x 1, SHCS, 18-8 SSSTL		4		0
20	91475A029	Washer, Lock, .25 x .49 OD, 300 SSSTL		2		0
19	90945A760	Washer, Flat, .25 x .47 OD, 300 SSSTL, Nas620-C416L		2		0
18	D1002542	TABLE BALANCE WEIGHT, .75#	304, 316 OR 302 SSSTL	4		0
17	D0901764	TABLE BALANCE WEIGHT	304, 316 OR 302 SSSTL	2		0
16	D1002540	Output Faraday Isolator Dummy Weight (rotate)	304, 316 OR 302 SSSTL	1		0
15	D1002533	Output Faraday Isolator Dummy Weight	304, 316 OR 302 SSSTL	1		0
14	92200A194	SCREW, SHC, 8-32 x 1/2, MS16995-26, MC #92200A194	300 SSSTL	12		0
13	92200A542	Screw, Socket Head Cap, 1/4-20 UNC-2A x 1.00 lg.	300 SSSTL	37		0
12	N35P500500HT	BLUNTING MAGNETICS-NEODYMIUM .50 DIA X .50L	NEO 35	16		0
11	D1002364	FARADAY ISOLATOR BEAM DUMP ASSY	N/A	2		0
10	D0900614	PRISM MOUNT ASSY_LH	N/A	1		0
9	D1001963	OUTPUT ALIGNMENT FIXTURE ASSY	N/A	1		0
8	D0900778	MAGNET ATTACHMENT PLATE	430F or 430FR	2		0
7	D0900440	TFP POLARIZER PLATE ASSY	--	1		0
6	D0900353	HALF WAVE PLATE HOLDER ASSY	--	1		0
5	D1001918	INPUT BAFFLE ASSY	N/A	1		0
4	D0900615	PRISM MOUNT ASSY_RH	N/A	1		0
3	D0900464	ROTATOR 20mm 1064nm-VAC COMPATIBLE	UNKNOW N	1		0
2	D1001958	WIRE SUPPORT BLOCK ASSY	N/A	4		0
1	D0900015	FARADAY ISOLATOR TABLE	6061-T6 AI	1		0

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

- INTERPRET DRAWING PER ASME Y14.5-1994.
- REMOVE ALL SHARP EDGES, R.02 MIN.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410.

DIMENSIONS ARE IN
TOLERANCES:
.XX ±
.XXX ±
ANGULAR ± °

MATERIAL: -- FINISH: --

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO SUB-SYSTEM: AOS

PART NAME: FARADAY ISOLATOR TABLE ASSY

DESIGNER: MRUIZ
DRAFTER: MRUIZ
CHECKER: MRUIZ
APPROVAL: MRUIZ

DATE: 09/13/2010

SIZE: D DWG. NO.: D0900623

SCALE: 1:4 PROJECTION: 1st Angle

REV. v3

SHEET 1 OF 1

D0900623_AutLIGO_AOS_D0900136_Faraday Isolator Table Assy_PART PDM REV: X:158_DRAWING PDM REV: X:016

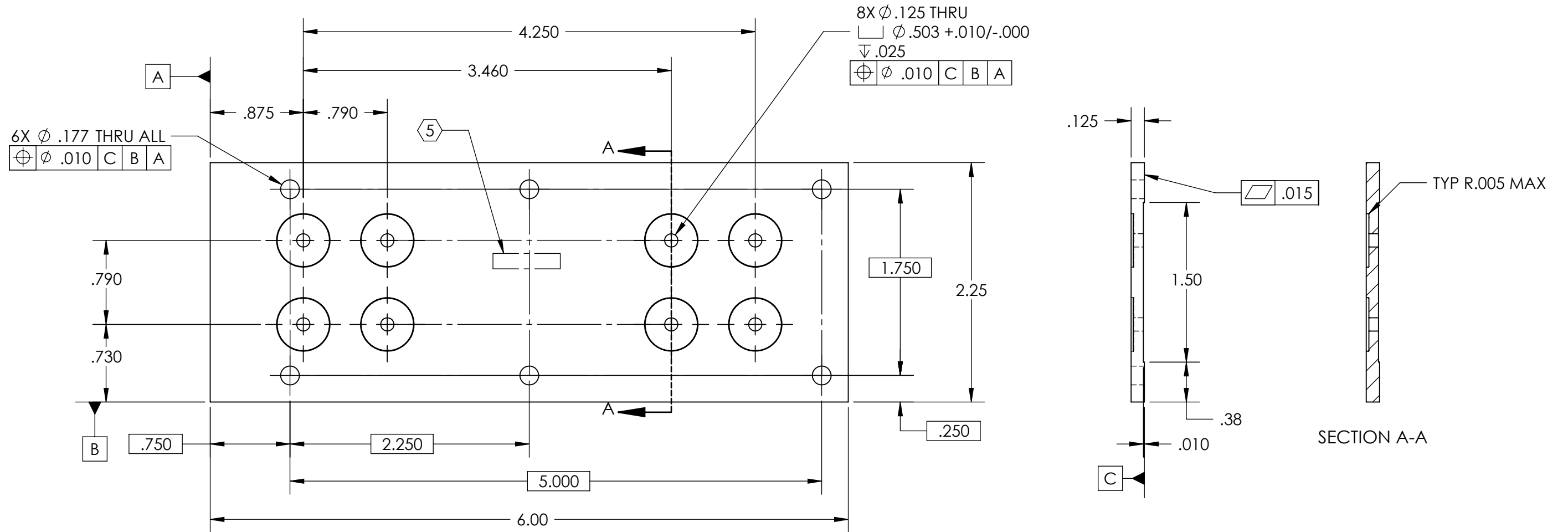
D0900778_AdlIGO_AOS_FID0900048_Magnet Attachment Plate, PART PDM REV: X-020, DRAWING PDM REV: X-013

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	27 APR 2009		
v2	08 OCT 2010	E1000563	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .02 .XXX ± .010 ANGULAR ± 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		MAGNET ATTACHMENT PLATE	
MATERIAL 430F OR 430FR		FINISH 63 μinch		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
NEXT ASSY D0900048				DESIGNER N. Nguyen		SIZE DWG. NO. B	
				DRAFTER K. Mailland		REV. v2	
				CHECKER C. Torrie		SCALE: 1:1	
				APPROVAL		PROJECTION:	
						SHEET 1 OF 1	

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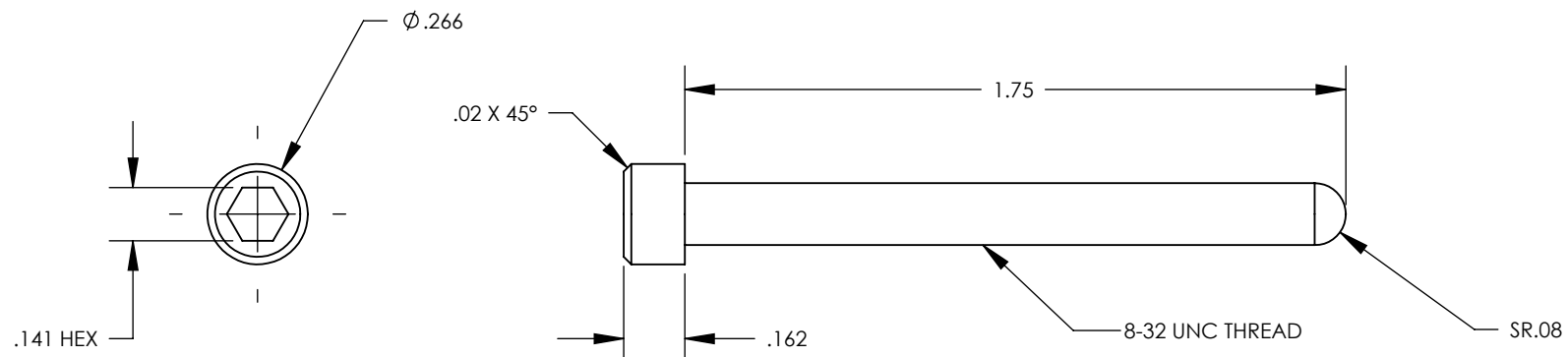
NOTES CONTINUED:

5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

7. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS, PLUGS OR RECYCLED MATERIAL). NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	02 MAR 2011	E1000563	-
-	-	-	-
-	-	-	-



D0900991, SHCS, 8-32 x 1.75, Full Thread, Round End, PART PDM REV: X-017, DRAWING PDM REV: X-001

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NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN
 TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± .5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL 300 SSSL or 18-8 SSSL FINISH N/A μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM ADVANCED LIGO SUB-SYSTEM
 NEXT ASSY MULTIPLE ASSYS

PART NAME		SCREW, SOCKET HEAD CAP, 8-32 X 1.75 LG. FULLY THREADED, ROUNDED END		
DESIGNER		SIZE	DWG. NO.	REV.
DRAFTER	M. RUIZ	B	D0900991	v1
CHECKER		SCALE: 2:1	PROJECTION:	SHEET 1 OF 1
APPROVAL				

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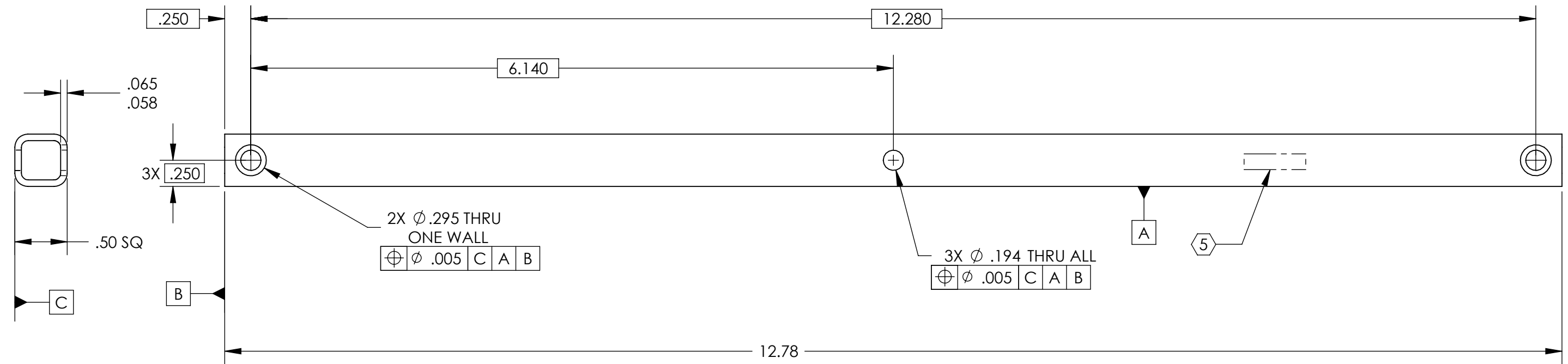
2

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D0901271_AdlIGO_AOS_FID0900579_Blade Guard Crosspiece, PART PDM REV: X-007, DRAWING PDM REV: X-010

- NOTES CONTINUED:**
- 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER AND REVISION ON NOTED SURFACE FOLLOWED ON THE NEXT LINE BY A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE .07" HIGH CHARACTERS. EXAMPLE: DXXXXXX-VY, S/N 001. A VIBRATORY TOOL MAY BE USED.
 - 6. SUGGESTED SOURCE:
AIRCRAFT SPRUCE & SPECIALTY CO.
P/N 03-00008, 6061T6 TUBE 1/2" X 1/2' X .058
AIRCRAFTSPRUCE.COM
 - 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

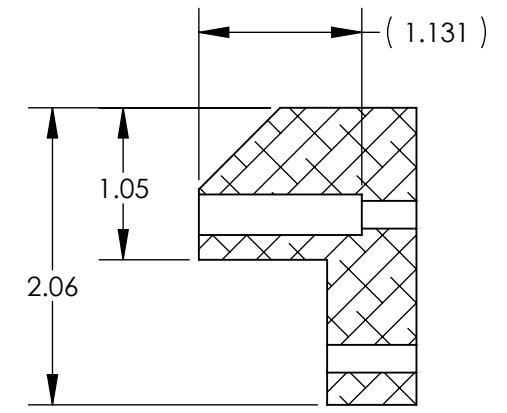
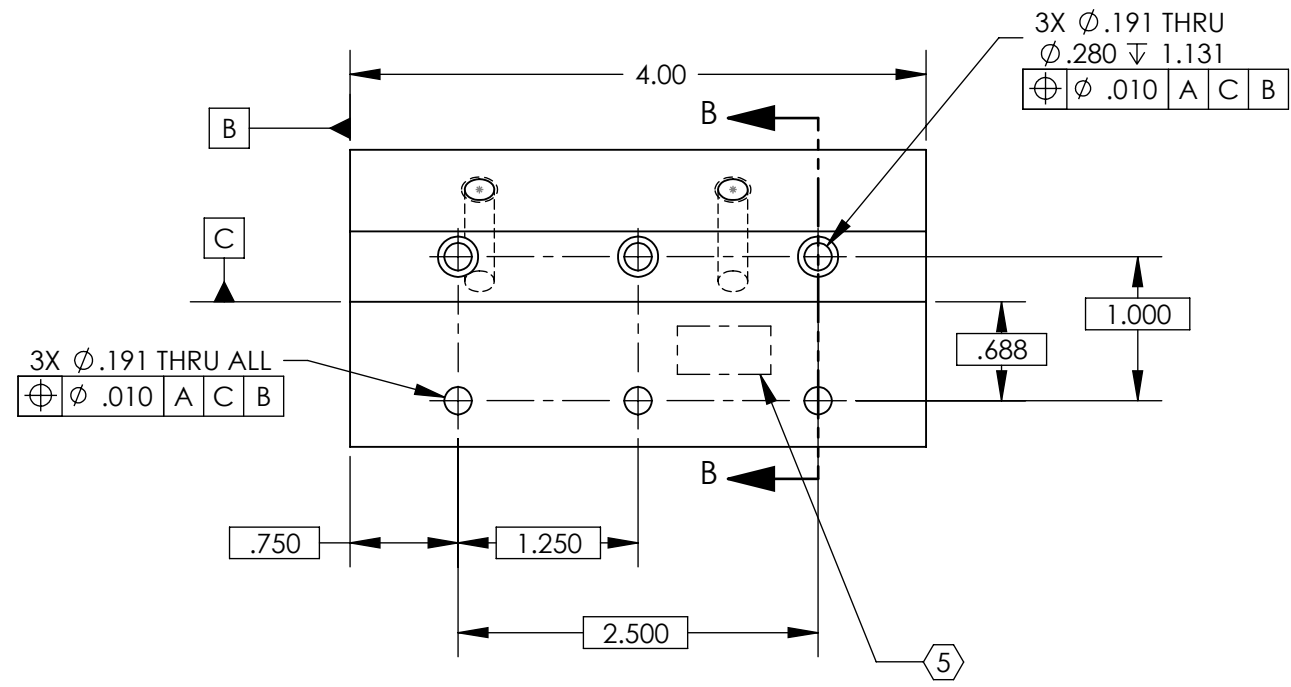
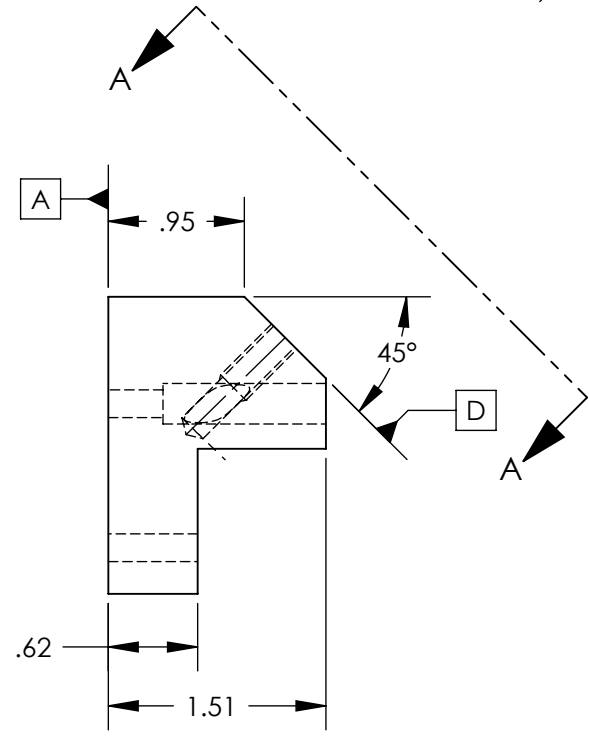
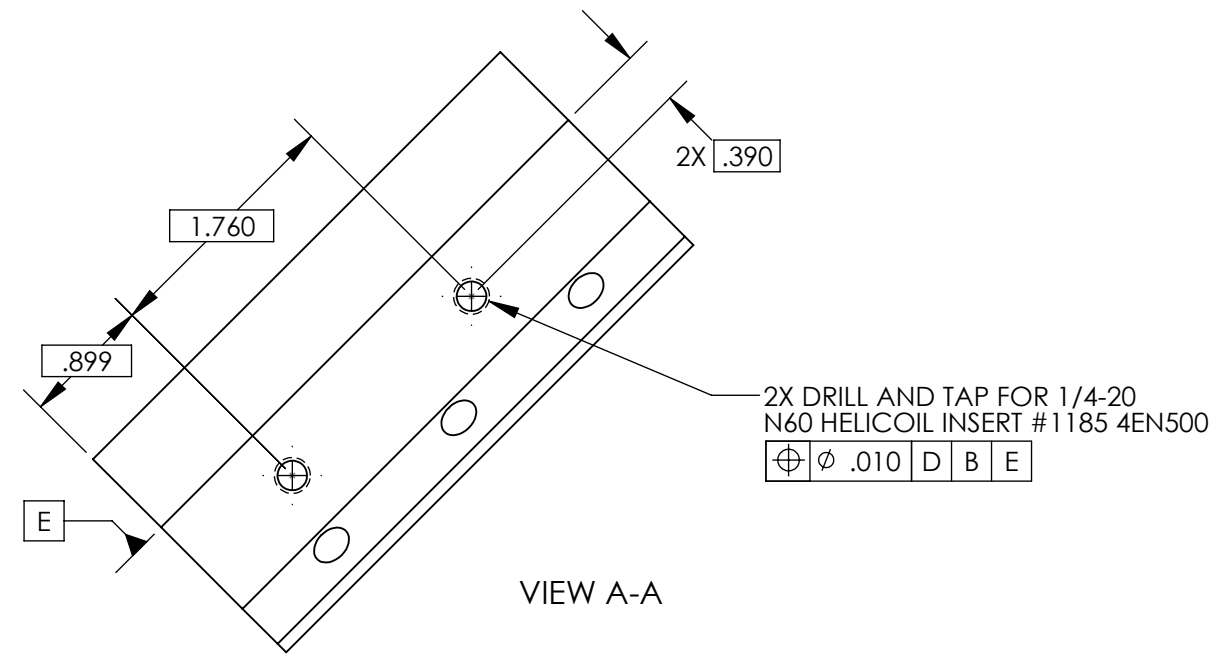
REV.	DATE	DCN #	DRAWING TREE #
v1	21 Jul 2009	E0900209	-
v2	07 OCT 2010	E1000563	-
v3	07 JAN 2011	E1000563	-



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .02 .XXX ± .005 ANGULAR ± 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410.		BLADE GUARD CROSSPIECE	
						MATERIAL 6061-T6 Al FINISH stock tubing	
				NEXT ASSY D0900579		DESIGNER N.Nguyen 19 Jun 2009	
						DRAFTER K. Mailand 21 Jul 2009	
						CHECKER C. Torrie 22 Jul 2009	
						APPROVAL	
						SIZE DWG. NO. B D0901271 REV. v3	
						SCALE: 1:4 PROJECTION: SHEET 1 OF 1	

- NOTES CONTINUED:**
- 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 - 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 - 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
 - 8. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4
 - 9. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL, AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN	
TOLERANCES: .XX ± .01 .XXX ± .005	
ANGULAR ± 0.5°	
1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	
MATERIAL	FINISH
6061-T6 Al	63 μinch

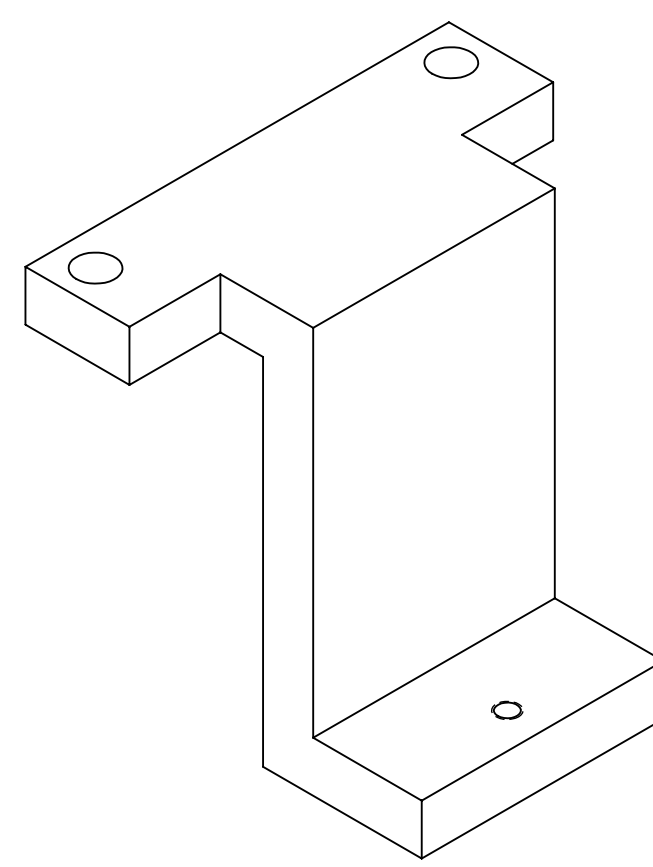
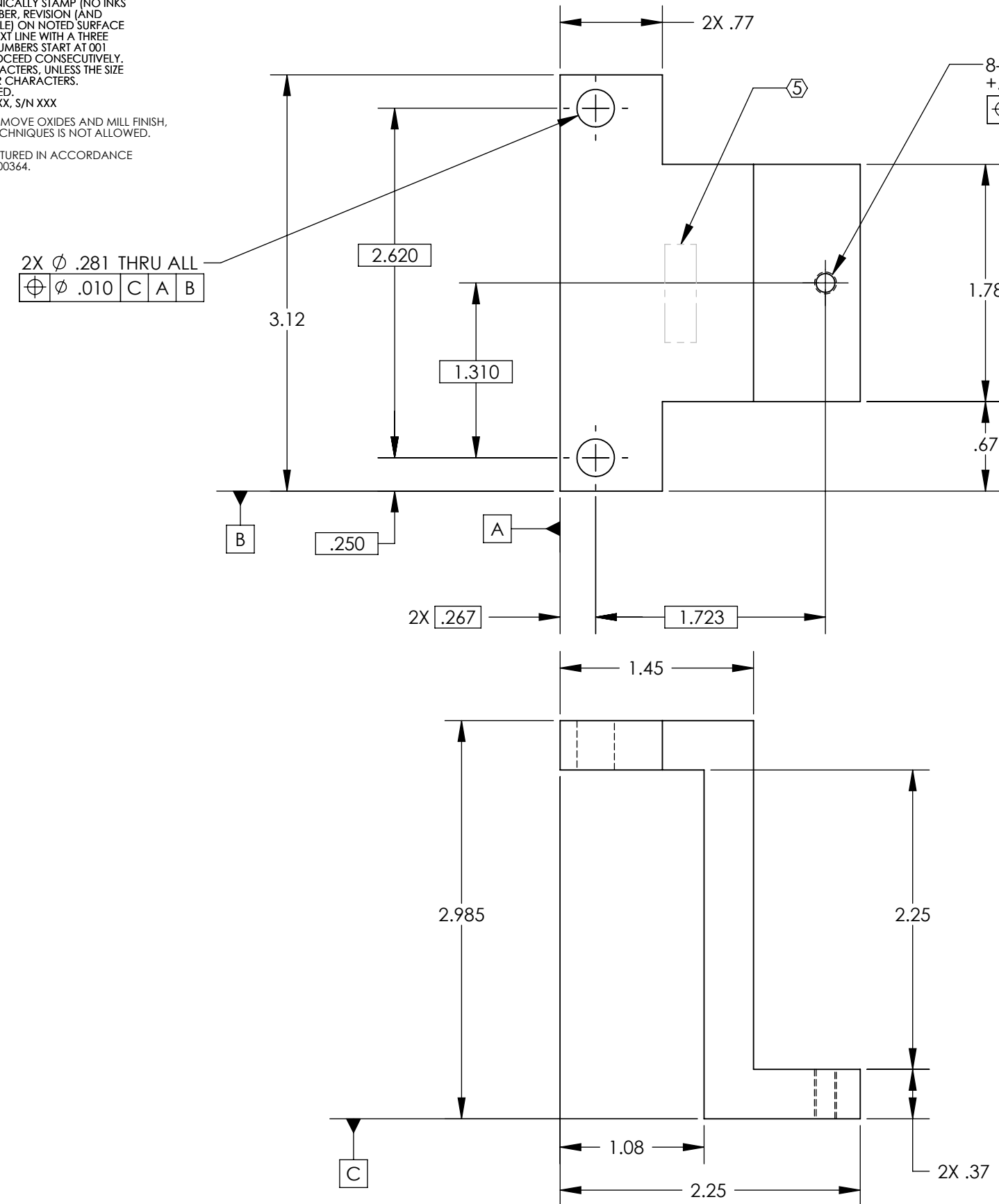
CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
ADVANCED LIGO		BLADE CLAMP PLATFORM	
DESIGNER	DRFTER	SIZE	DWG. NO.
M. SMITH	N. Nguyen	B	D0901514
CHECKER	APPROVAL	REV.	
M. SMITH		v1	
NEXT ASSY		SCALE: 3:4	PROJECTION:
		SHEET 1 OF 1	

D0901514_Blade Clamp Platform, PART PDM REV: X-000, DRAWING PDM REV: X-000

D0901570_AdlIGO_AOS_FID0900136_Magnetic Plate Mounting Back Bracket, PART PDM REV: X-004, DRAWING PDM REV: X-008

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	05 AUG 2009		
v2	07 OCT 2010	E1000563	-
v3	01 MAR 2011	E1000563	-



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES. TOLERANCES: .XX \pm .02 .XXX \pm .010 ANGULAR \pm 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410.		MAGNETIC PLATE MOUNTING BACK BRACKET	
MATERIAL 6061-T6 Al		FINISH 63 μ inch		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
NEXT ASSY D0900136		DESIGNER N.Nguyen 04 Aug 2009		SIZE DWG. NO. B D0901570		REV. v3	
		CHECKER M. Smith 05 Aug 2009		SCALE: 1:1		PROJECTION:	
		APPROVAL		SHEET 1 OF 1			

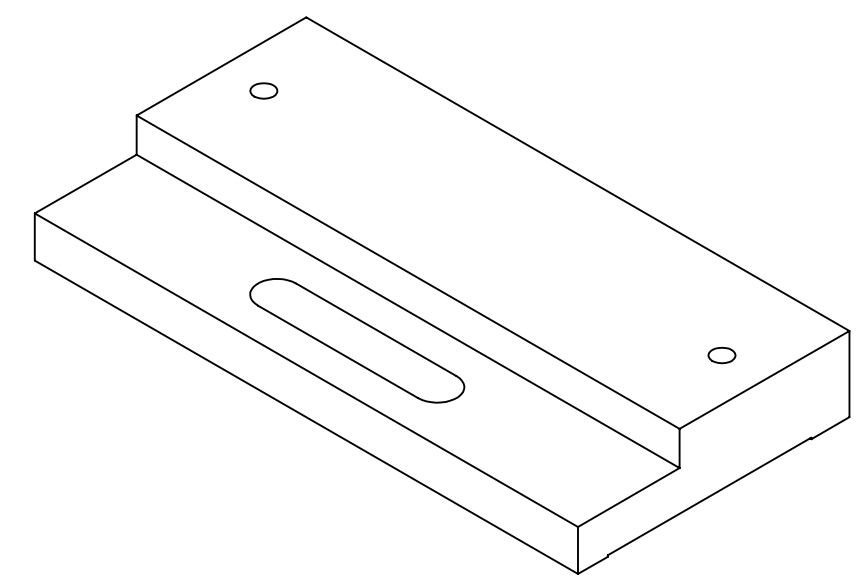
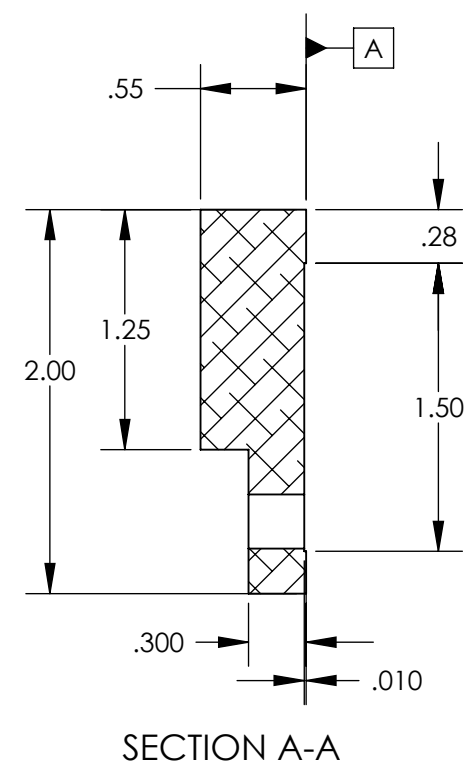
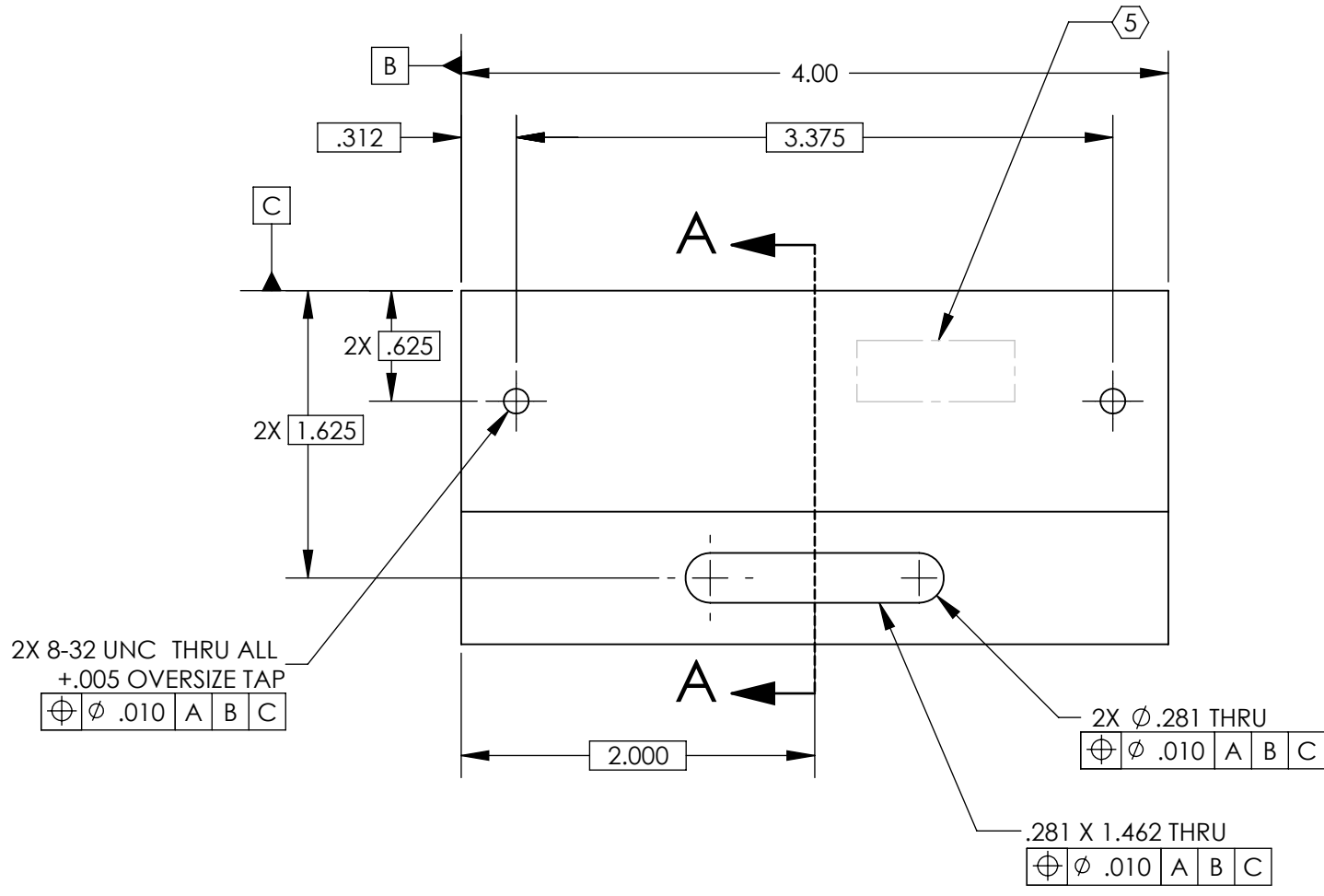
REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	
v2	28 FEB 2011	E1000563	

NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
DIMENSIONS ARE IN INCHES	
TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 0.5°	
1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	
MATERIAL	FINISH
304, 316 OR 302 SSSL	125 μinch

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
SYSTEM ADVANCED LIGO		TABLE BALANCE WEIGHT	
SUB-SYSTEM AOS		DESIGNER	SIZE DWG. NO.
NEXT ASSY D0900623		M.RUIZ	B
		CHECKER	D0901764
		APPROVAL	REV. v2
		SCALE: 1:1	PROJECTION:
		SHEET 1 OF 1	

D0901764_AdlIGO_AOS_FID0900623_Table Balance Weight, PART PDM REV: X-020, DRAWING PDM REV: X-014

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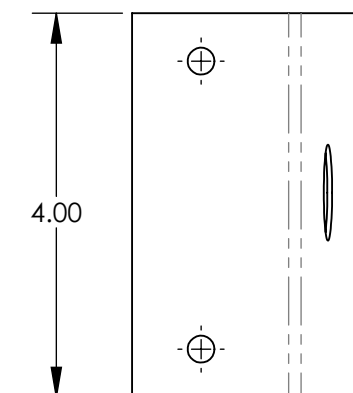
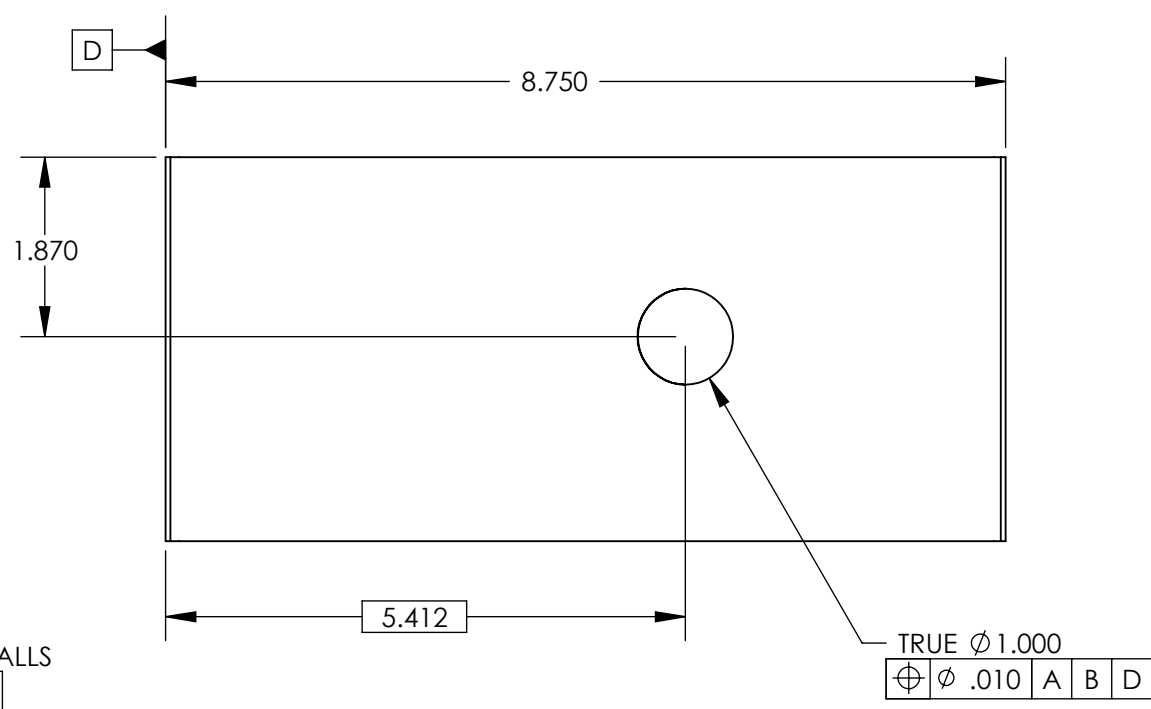
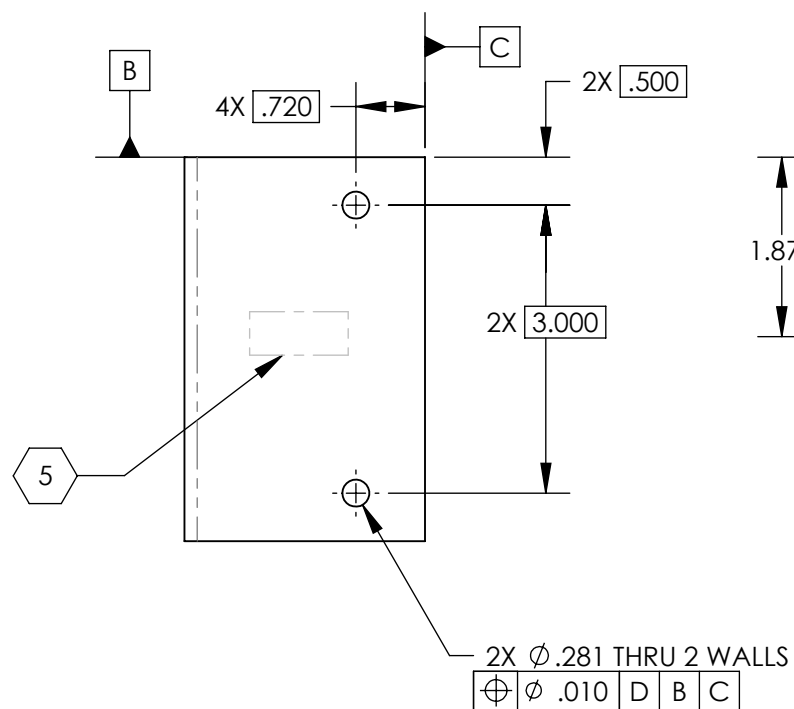
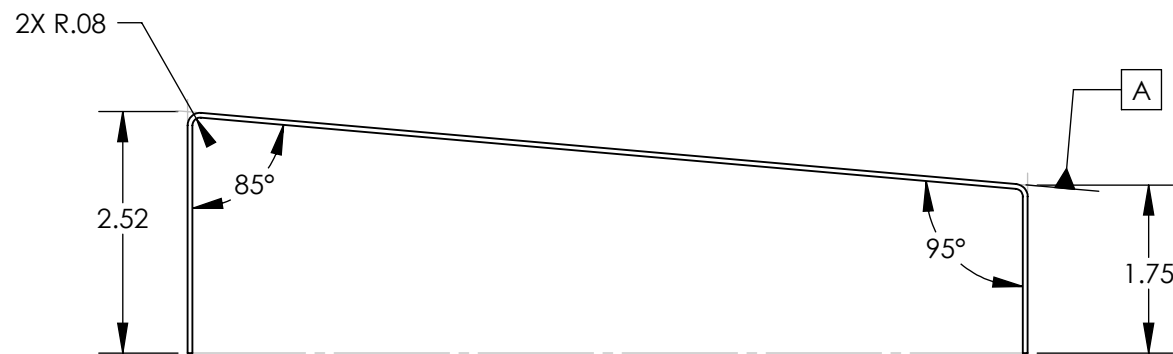
NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. PORCELAIN COAT PER SPECIFICATIONS E1000083

7. MATERIAL: MACHINE FINISH AS RECEIVED

REV.	DATE	DCN #	DRAWING TREE #
v1	09 APR 2009	-	-
v2	07 OCT 2010	E1000563	-
v3	28 FEB 2011	E1000563	-



D0902845_AdlIGO_AOS_FID0900136_Reflection Baffle, PART PDM REV: X-011, DRAWING PDM REV: X-008

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN
TOLERANCES:
.XX ± .03
.XXX ± .010
ANGULAR ± 1.0°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, R.02 MIN.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL: A424 TYPE I, 18GA, SSTL OR 304
FINISH: SEE NOTE 7

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO
SUB-SYSTEM: AOS
NEXT ASSY: D0900136

PART NAME: REFLECTION BAFFLE

DESIGNER		SIZE	DWG. NO.	REV.
DRAFTER	MRUIZ		D0902845	v3
CHECKER				
APPROVAL		SCALE: 1:2	PROJECTION:	SHEET 1 OF 1

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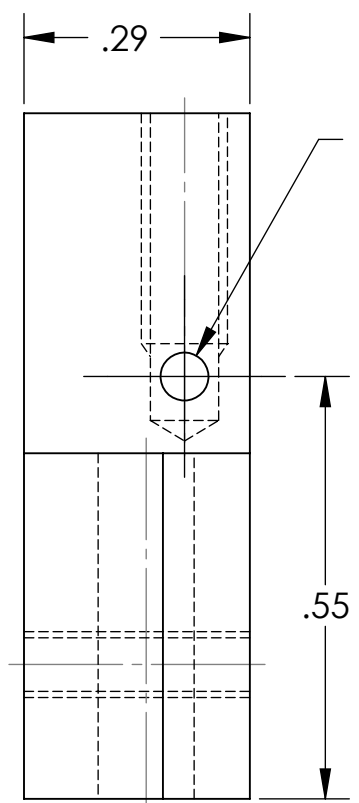
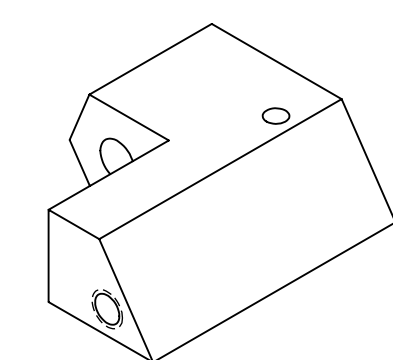
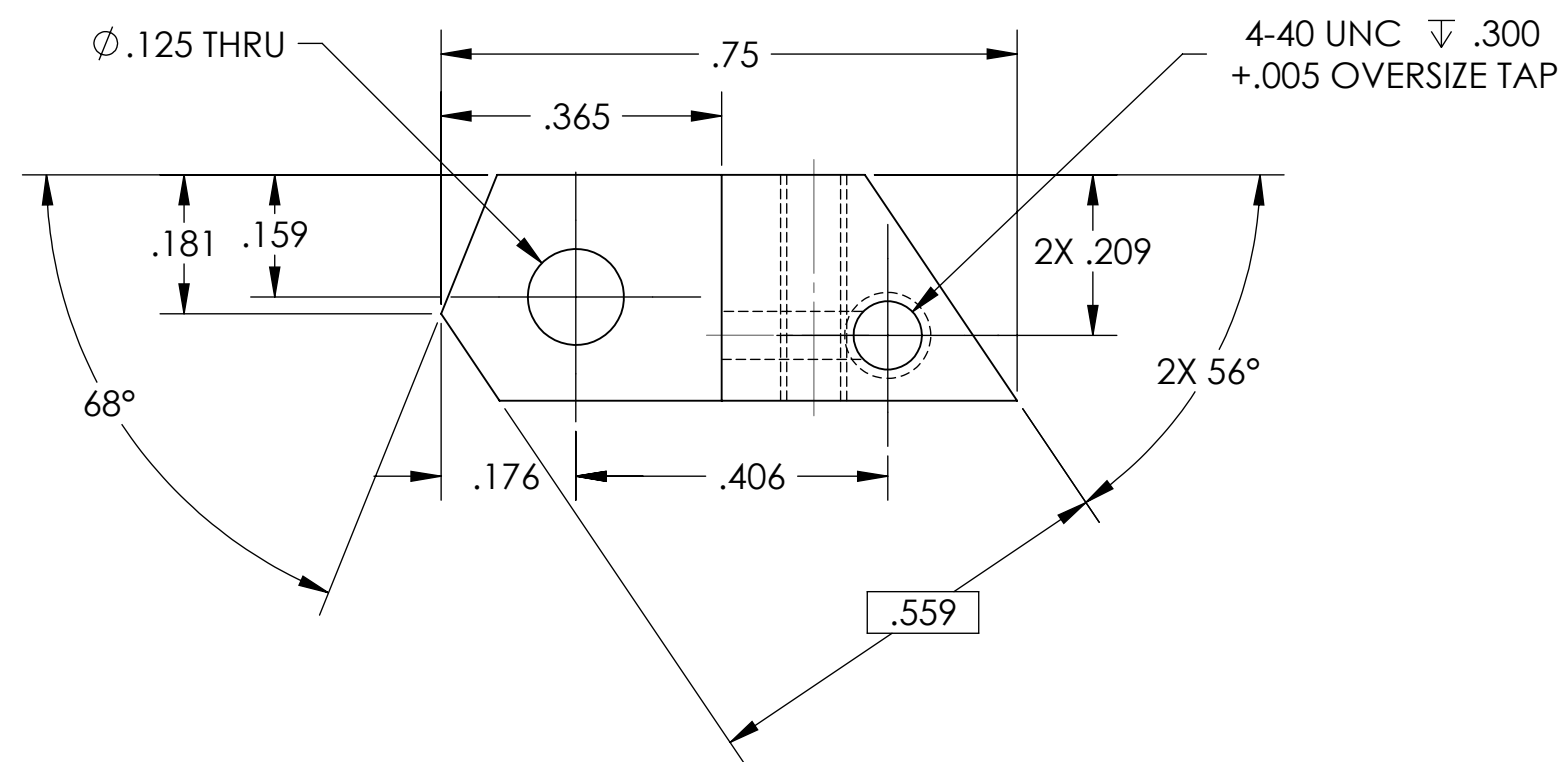
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D1001860_alIGO_AOS_D0900615_Faraday Isolator Spring Block RH, PART PDM REV: X-011, DRAWING PDM REV: X-006

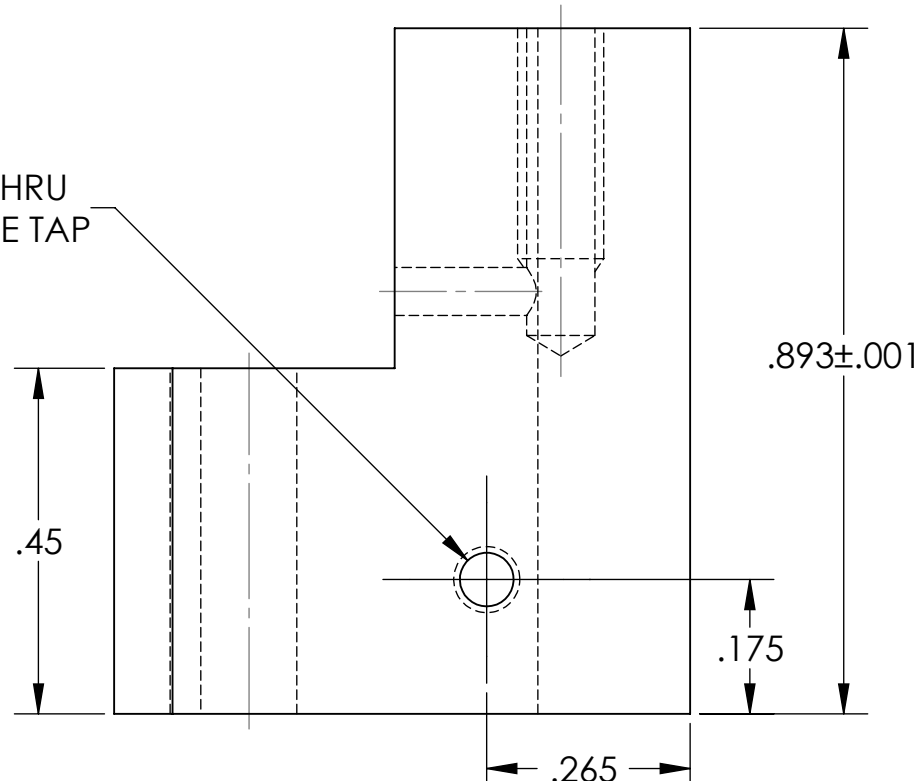
- NOTES CONTINUED:**
- 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
EXAMPLE (PART): 001-v1
EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD
 - 6. APPROXIMATE WEIGHT = 0.011 LB.
 - 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 - 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
v2	28 FEB 2011	E1000563	-
-	-	-	-



$\phi .06$
VENT HOLE THRU TAP HOLE

2-56 UNC THRU
+.003 OVERSIZE TAP



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				SYSTEM		SPRING BLOCK_RH	
1. INTERPRET DRAWING PER ASME Y14.5-1994.				ADVANCED LIGO		DESIGNER	
2. REMOVE ALL SHARP EDGES, R.02 MIN.				AOS		TQ. NGUYEN 14 JUL 2010	
3. DO NOT SCALE FROM DRAWING.				NEXT ASSY		SIZE DWG. NO.	
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.				D0900615		B D1001860	
MATERIAL		FINISH		CHECKER		REV.	
6061-T6 Al		63 μ inch		M. SMITH		v2	
TOLERANCES:		ANGULAR $\pm 0.5^\circ$		APPROVAL		SCALE: 4:1 PROJECTION:	
.XX $\pm .01$				D. COYNE		SHEET 1 OF 1	
.XXX $\pm .005$							

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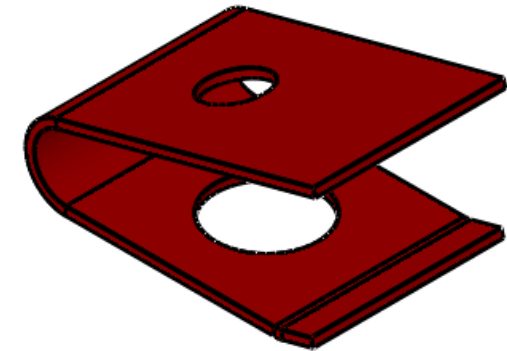
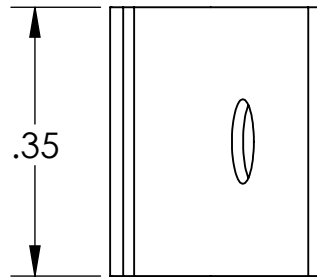
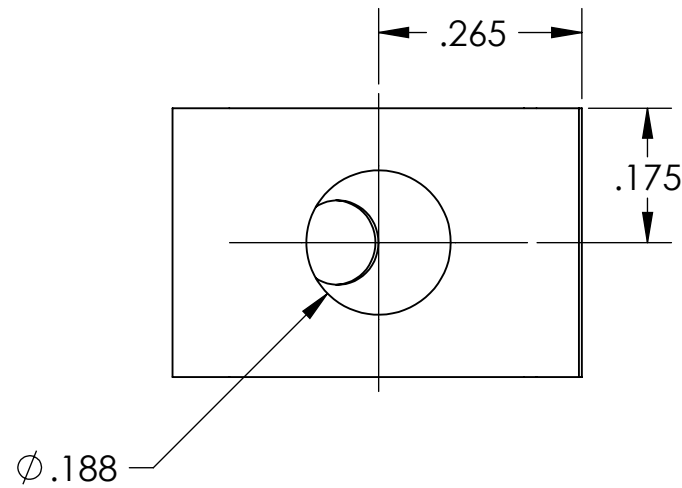
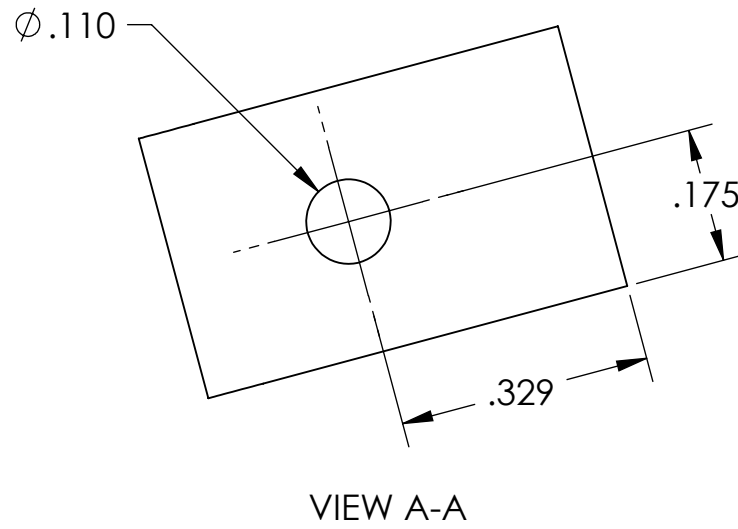
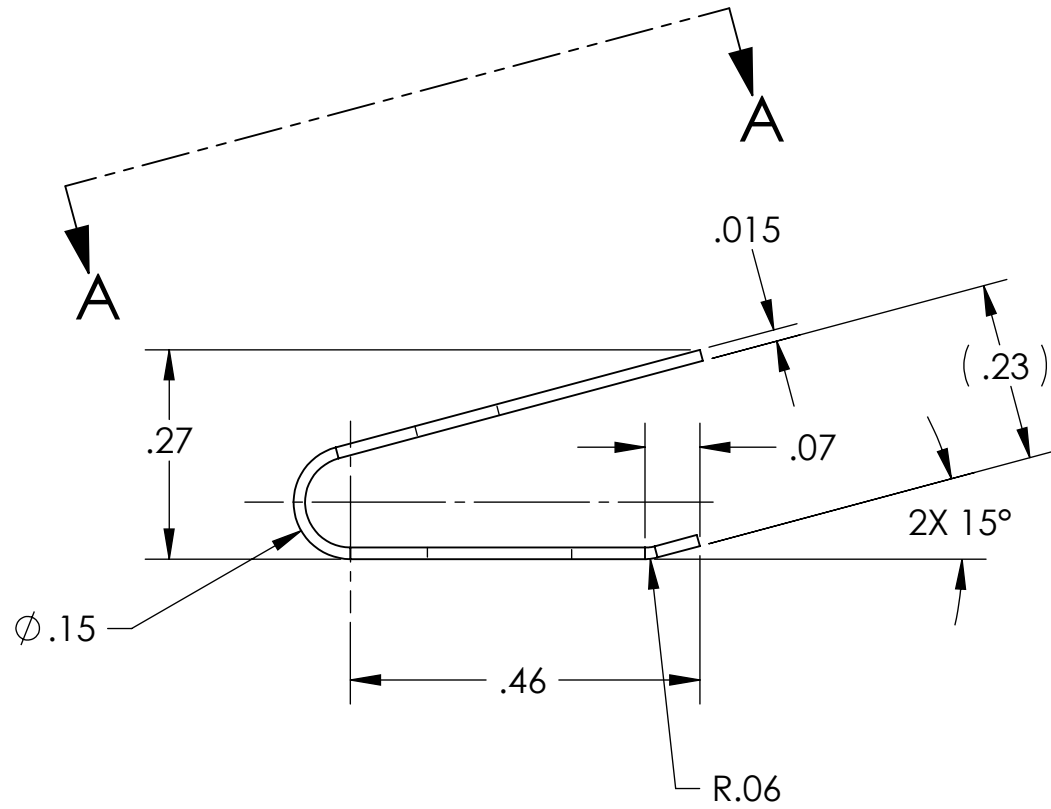
1

NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

6. APPROXIMATE WEIGHT = 0.002 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-



GENERAL VIEW FOR REFERENCE ONLY
NO SCALE

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± 0.5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES, R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.
 MATERIAL 304 SSSL
 FINISH 63 μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY
 SYSTEM ADVANCED LIGO SUB-SYSTEM AOS
 NEXT ASSY D0900614_D0900615

DESIGNER			PART NAME		
TQ. NGUYEN	15 JUL 2010	U-SRING	U-SRING		
DRAFTER			SIZE DWG. NO.		
TQ. NGUYEN	23 AUG 2010	B	D1001861		
CHECKER			REV.		
M. SMITH			v2		
APPROVAL			SCALE: 4:1 PROJECTION:		
D. COYNE			SHEET 1 OF 1		

D1001861_allIGO_AOS_D0900614_Faraday Isolator U-Spring, PART PDM REV: X-005, DRAWING PDM REV: X-005

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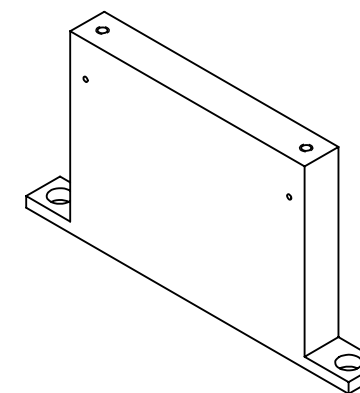
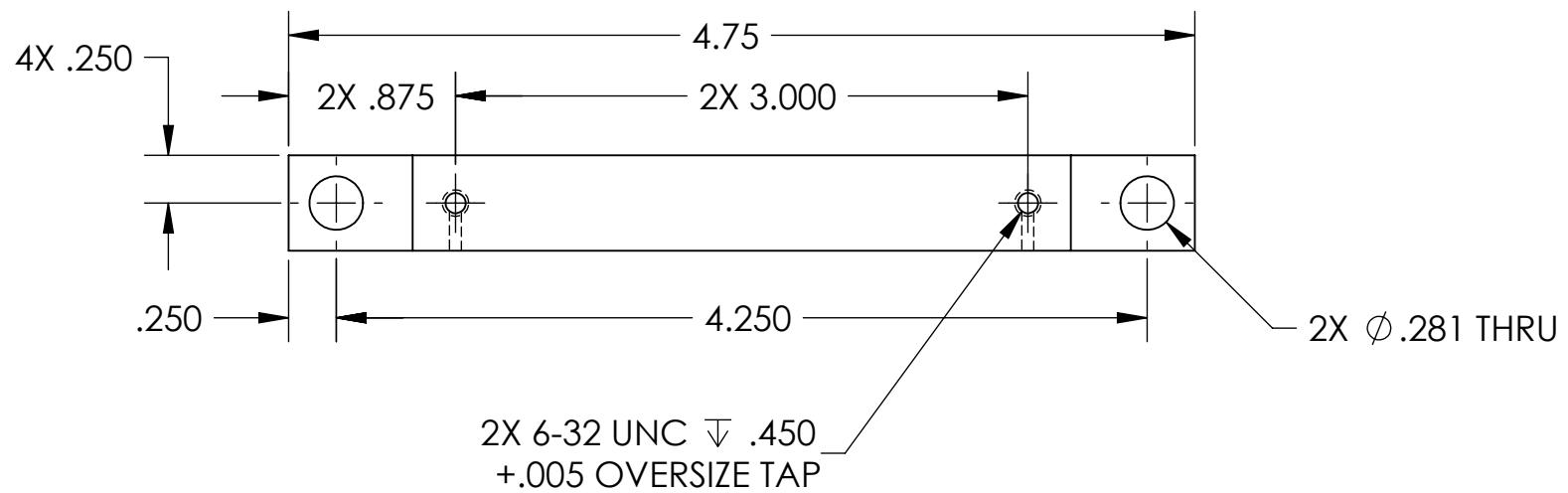
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D1001862_alIGO_AOS_D0900614_Faraday Isolator Base Mount Foot, PART PDM REV: X-012, DRAWING PDM REV: X-007

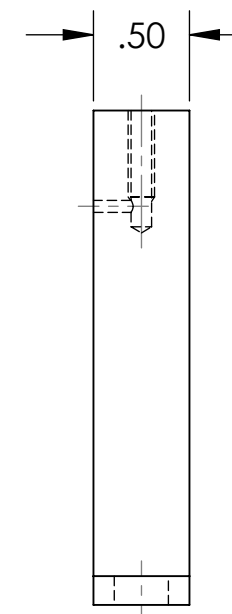
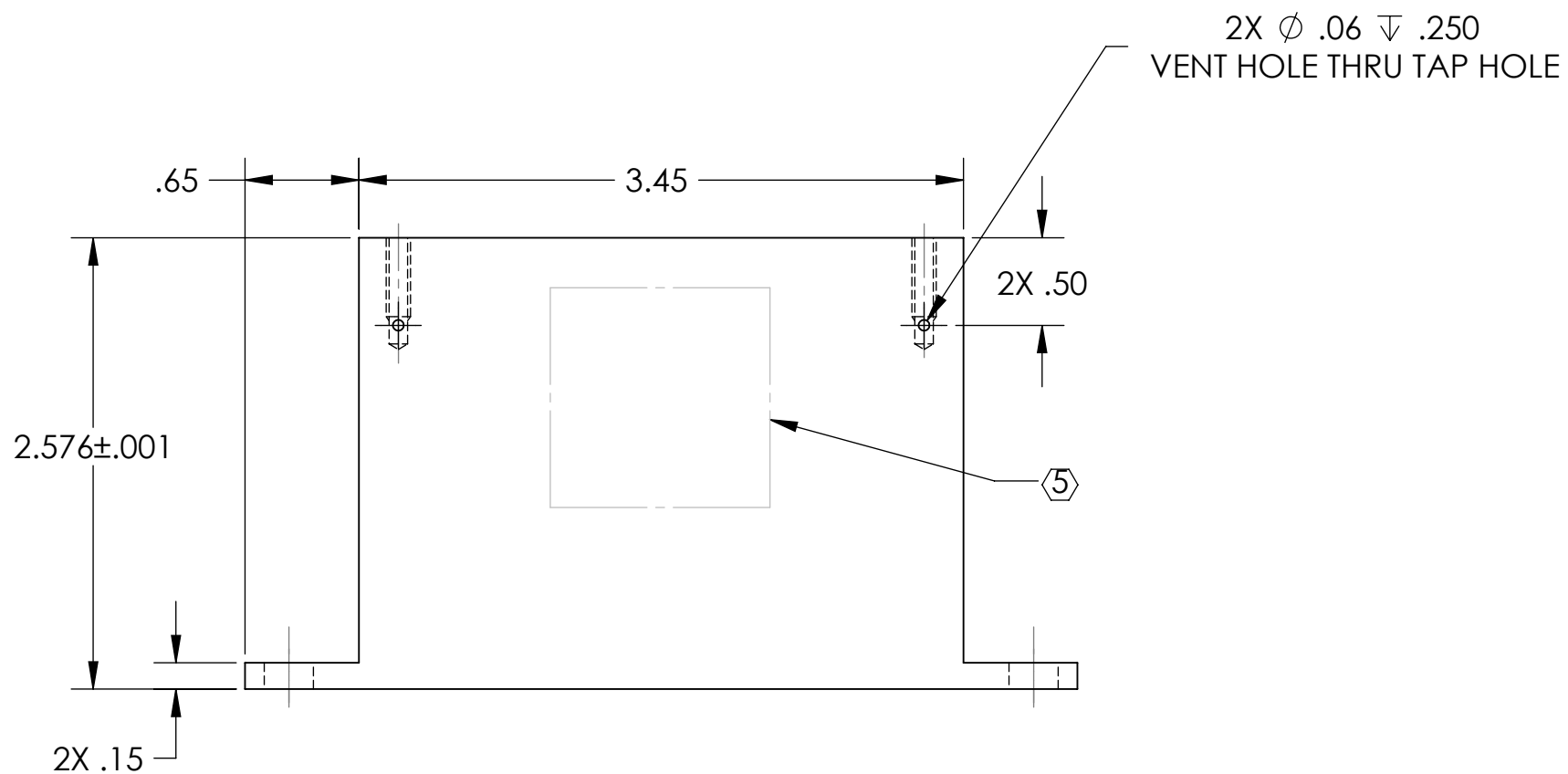
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 0.472 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
v2	28 FEB 2011	E1000563	-
v3	25 MAR 2011	-	-



GENERAL VIEW FOR REFERENCE ONLY NO SCALE



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± 0.5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES, R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL 6061-T6 Al FINISH 63 μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM ADVANCED LIGO SUB-SYSTEM AOS
 NEXT ASSY D0900615-D0900614

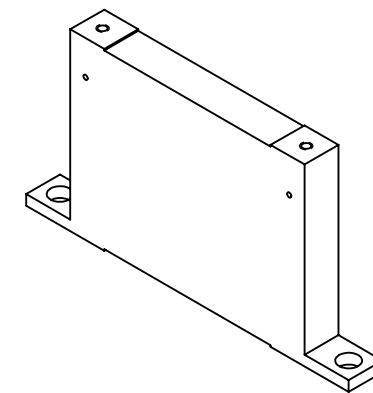
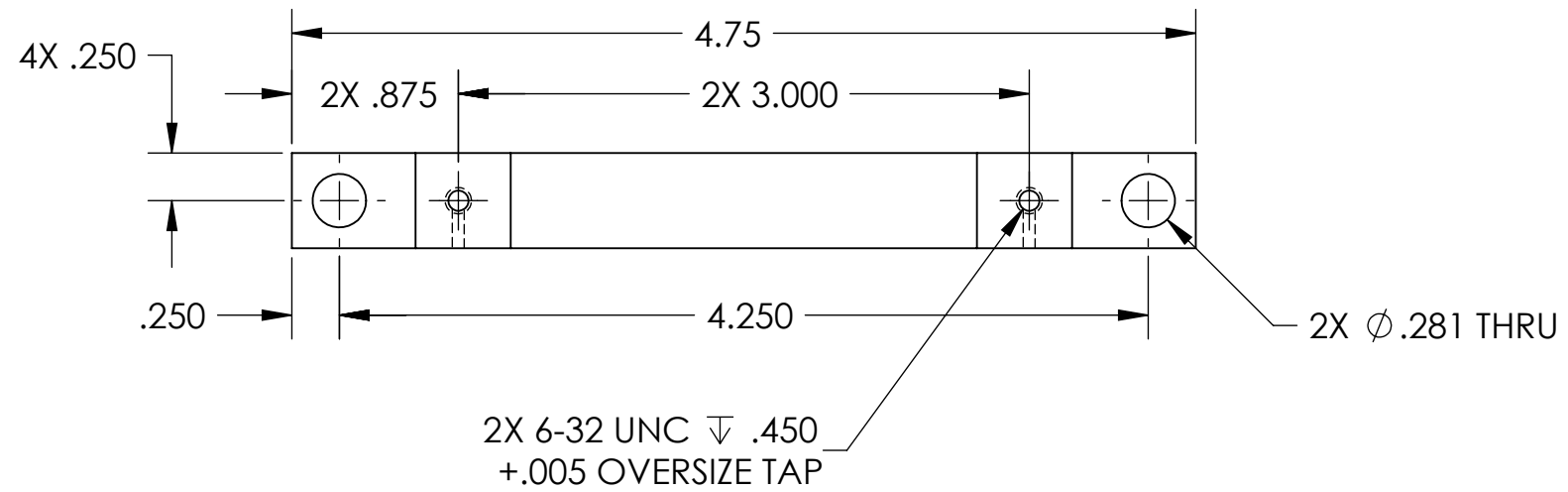
PART NAME		PRISM BASE SUPPORT	
DESIGNER	TQ. NGUYEN	19 JUL 2010	SIZE DWG. NO.
DRAFTER	TQ. NGUYEN	23 AUG 2010	B
CHECKER	M. SMITH		D1001862
APPROVAL	D. COYNE		REV. v3
SCALE: 1:1		PROJECTION:	SHEET 1 OF 1

D1001862_alIGO_AOS_D0900614_Faraday Isolator Base Mount Foot, PART PDM REV: X-013, DRAWING PDM REV: X-008

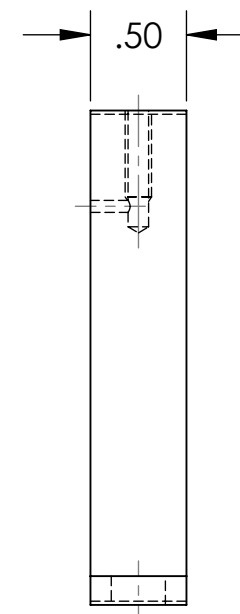
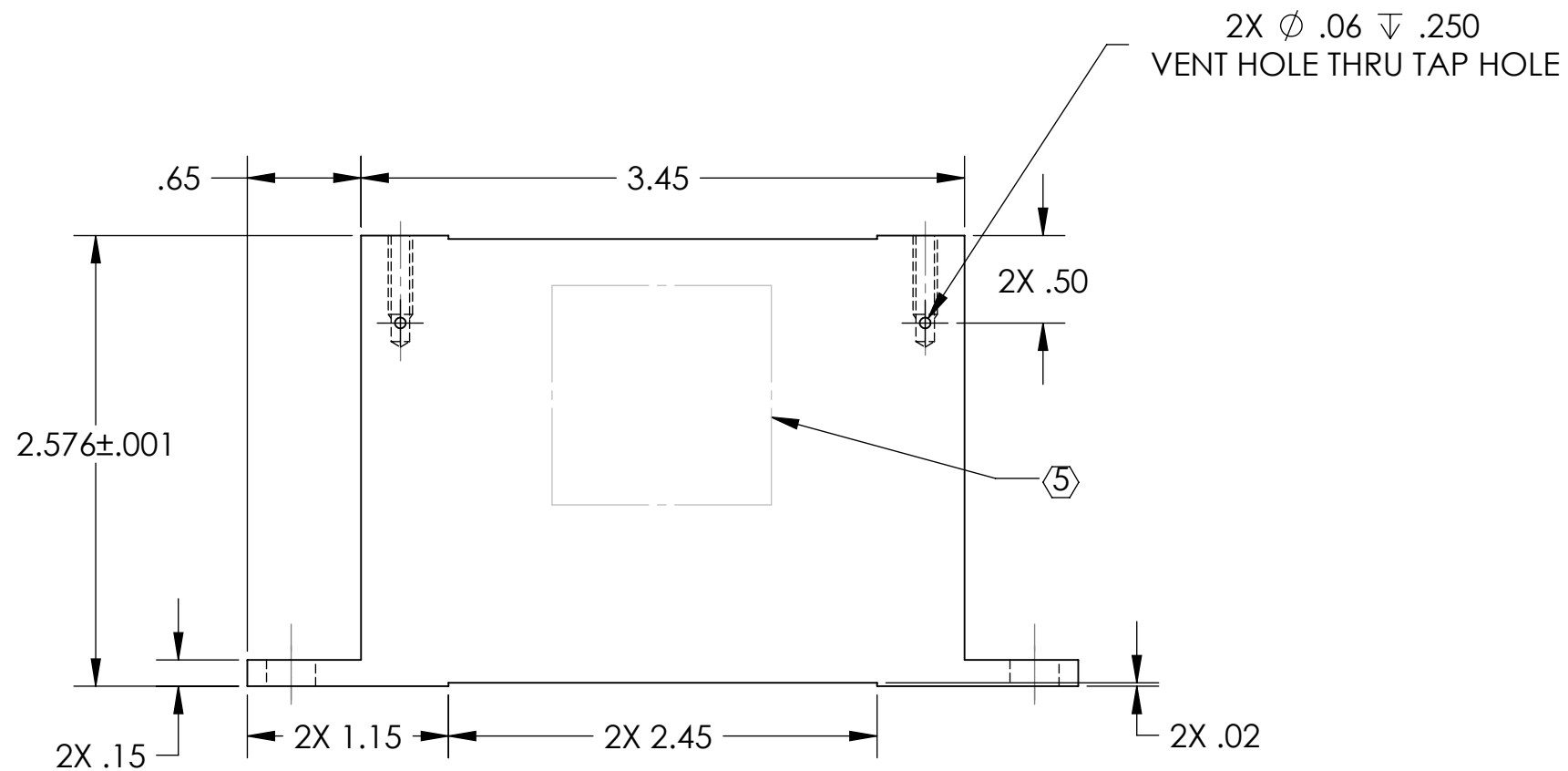
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 0.472 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
v2	28 FEB 2011	E1000563	-
v3	25 MAR 2011	E1000563	-
v4	01 APR 2011	E1000563	-



GENERAL VIEW FOR REFERENCE ONLY NO SCALE



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± 0.5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES, R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

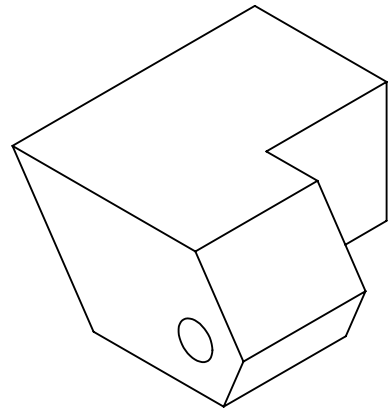
MATERIAL 6061-T6 Al FINISH 63 μinch

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
SYSTEM ADVANCED LIGO SUB-SYSTEM AOS		PRISM BASE SUPPORT	
DESIGNER	TQ. NGUYEN	19 JUL 2010	SIZE DWG. NO.
DRAFTER	TQ. NGUYEN	23 AUG 2010	B
CHECKER	M. SMITH		D1001862
APPROVAL	D. COYNE		REV. v4
NEXT ASSY D0900615-D0900614		SCALE: 1:1	PROJECTION: SHEET 1 OF 1

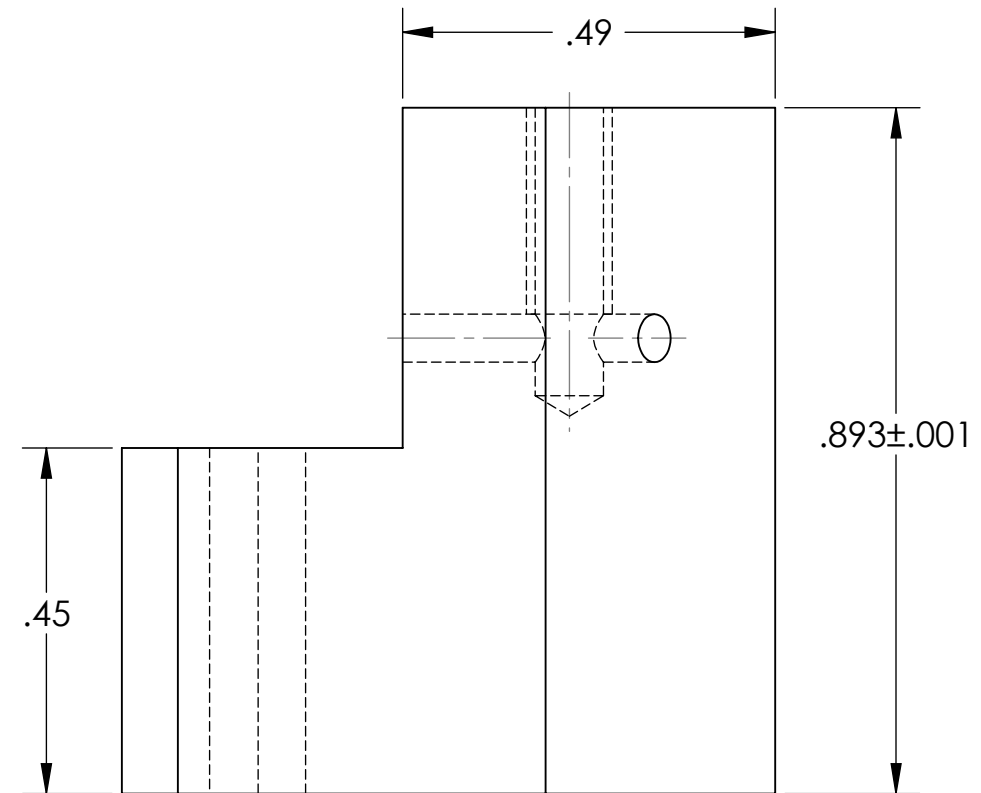
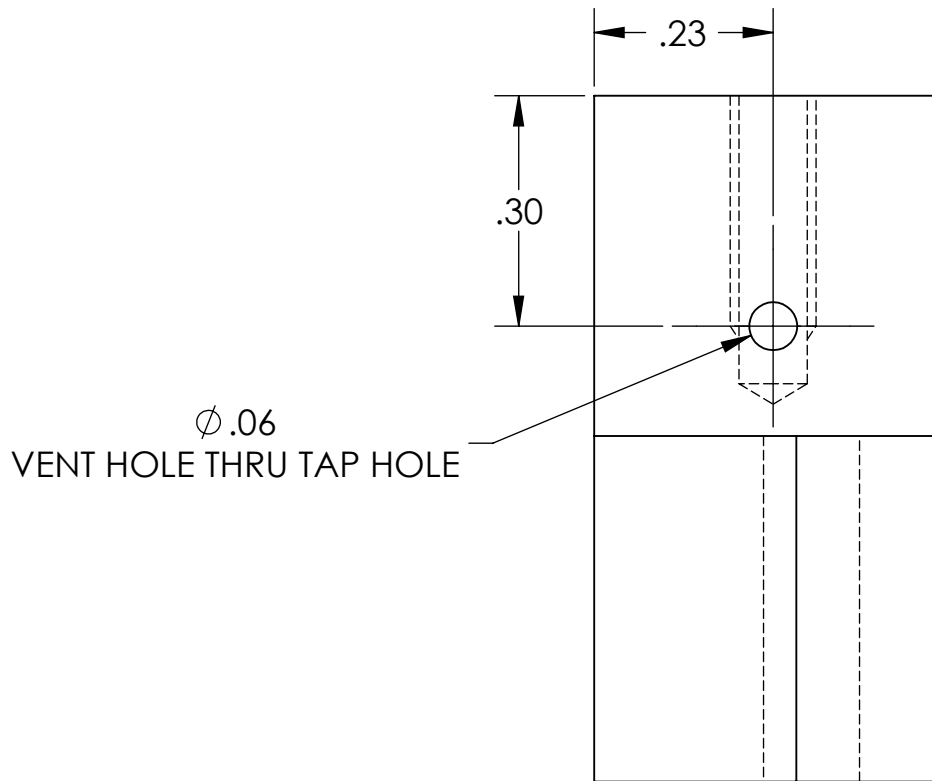
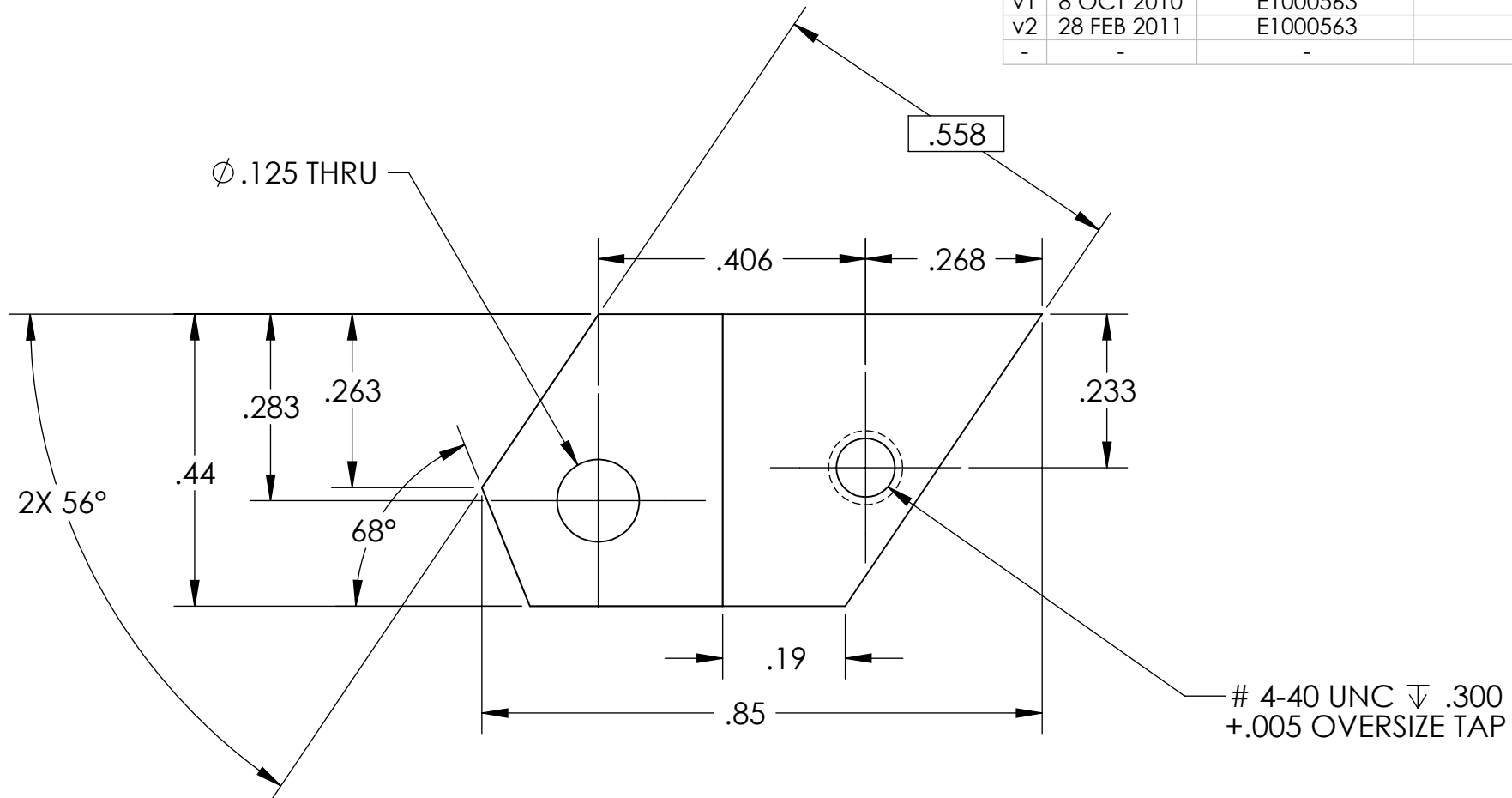
D1001870_alIGO_AOS_D0900614_Faraday Isolator Fixed Stop LH, PART PDM REV: X-005, DRAWING PDM REV: X-006

NOTES CONTINUED:
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
EXAMPLE (PART): 001-v1
EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

6. APPROXIMATE WEIGHT = 0.018 LB.
7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.



GENERAL VIEW FOR REFERENCE ONLY NO SCALE



REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
v2	28 FEB 2011	E1000563	-
-	-	-	-

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, R.02 MIN.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

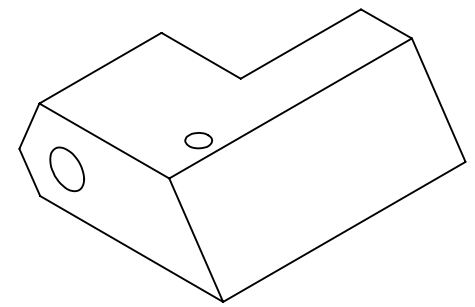
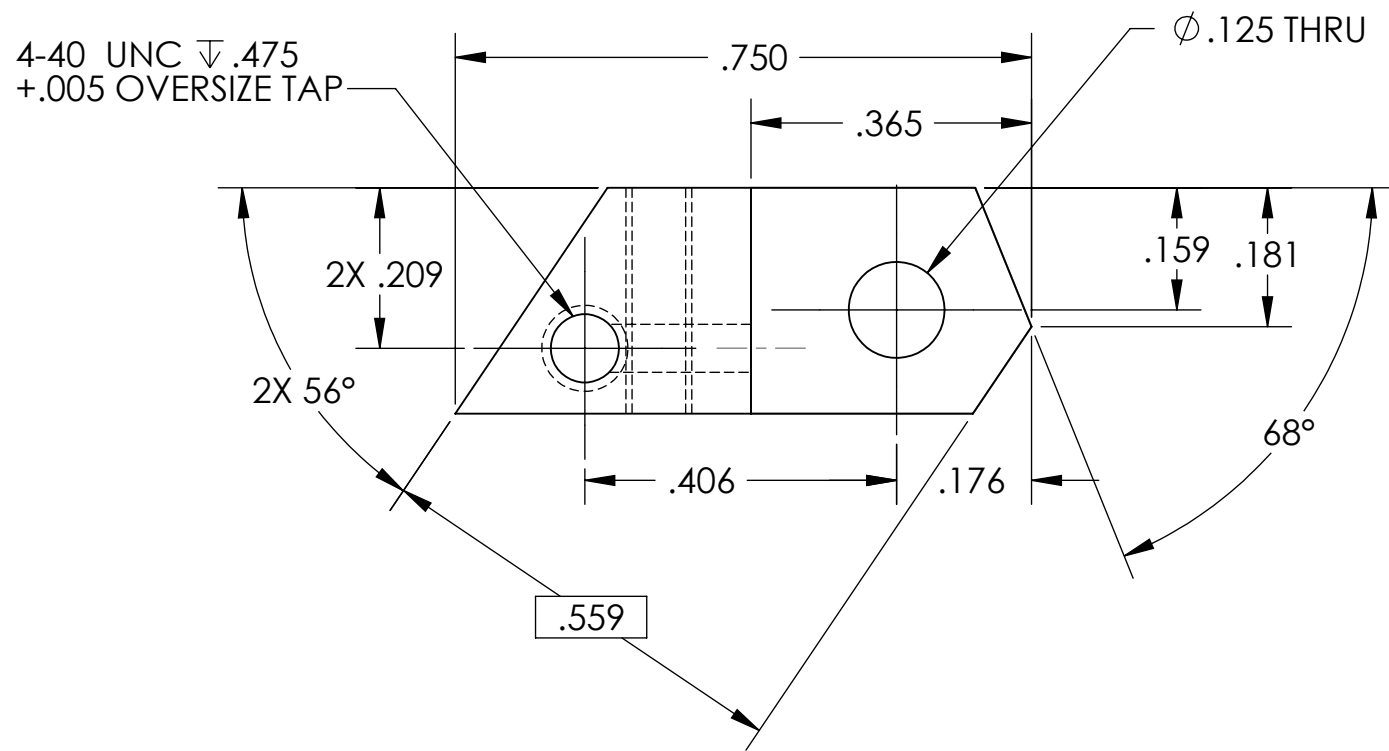
DIMENSIONS ARE IN INCHES
TOLERANCES:
.XX ± .01
.XXX ± .005
ANGULAR ± 0.5°

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
MATERIAL 6061-T6 Al		FINISH 63 μinch	
NEXT ASSY D0900614		PART NAME FIXED STOP_LH	
DESIGNER TQ. NGUYEN	15 JUL 2010	SIZE B	DWG. NO. D1001870
DRAFTER TQ. NGUYEN	27 AUG 2010	SCALE: 4:1	PROJECTION:
CHECKER M. SMITH			SHEET 1 OF 1
APPROVAL D. COYNE			REV. v2

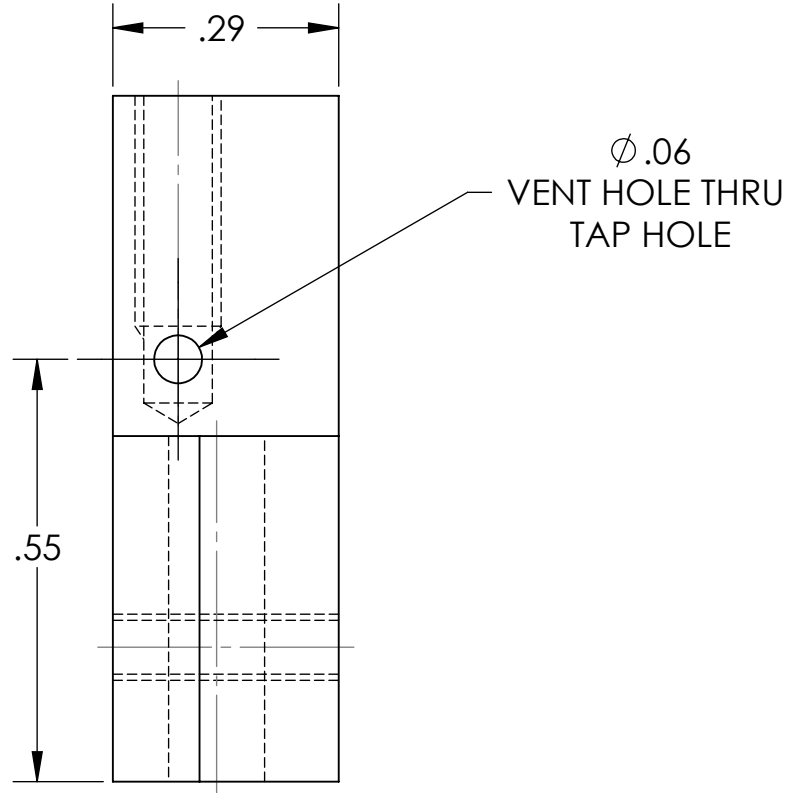
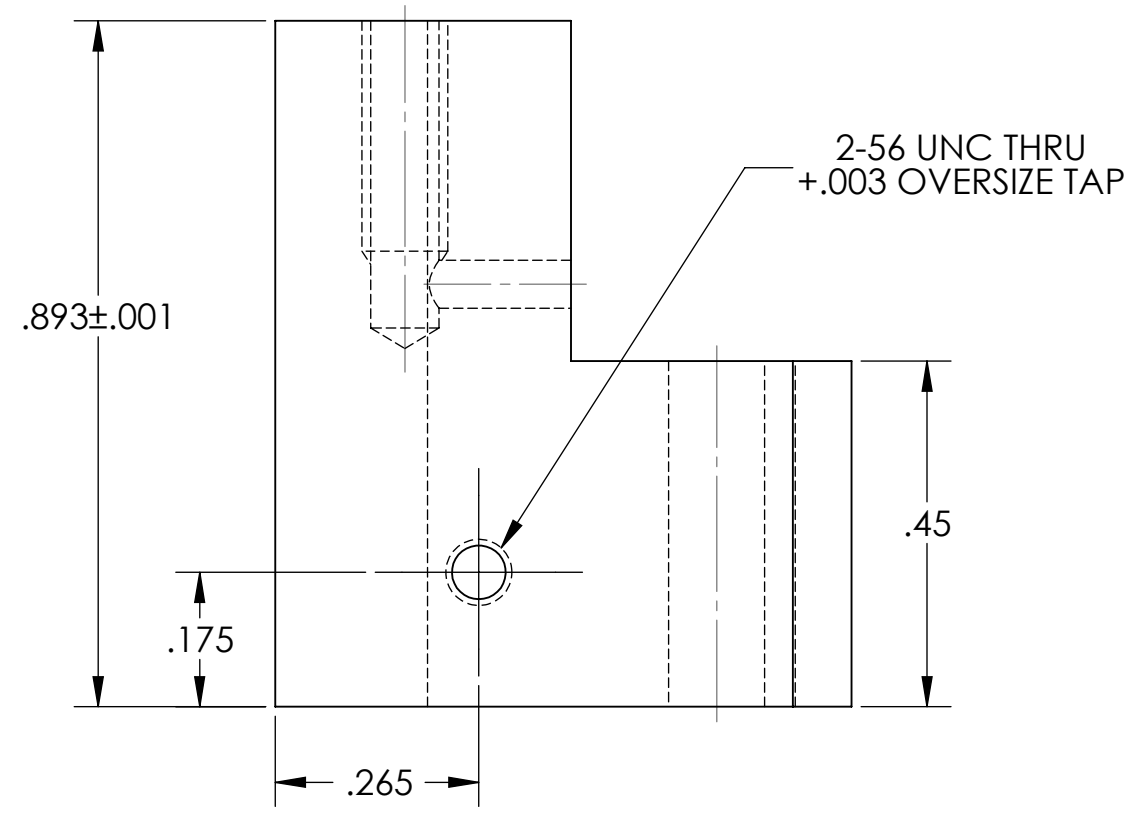
D1001871_calIGO_AOS_D0900614_Faraday Isolator Spring Block LH, PART PDM REV: X-005, DRAWING PDM REV: X-005

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD
 6. APPROXIMATE WEIGHT = 0.011 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
v2	28 FEB 2011	E1000563	-
-	-	-	-



GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE



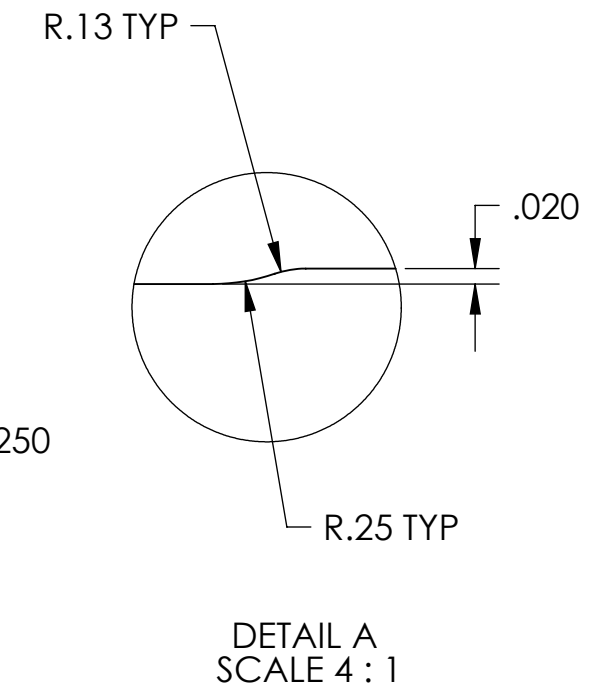
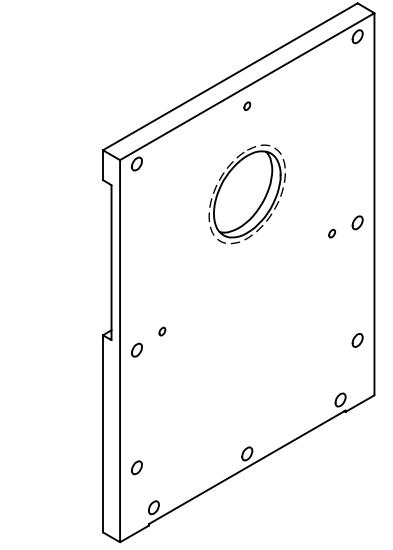
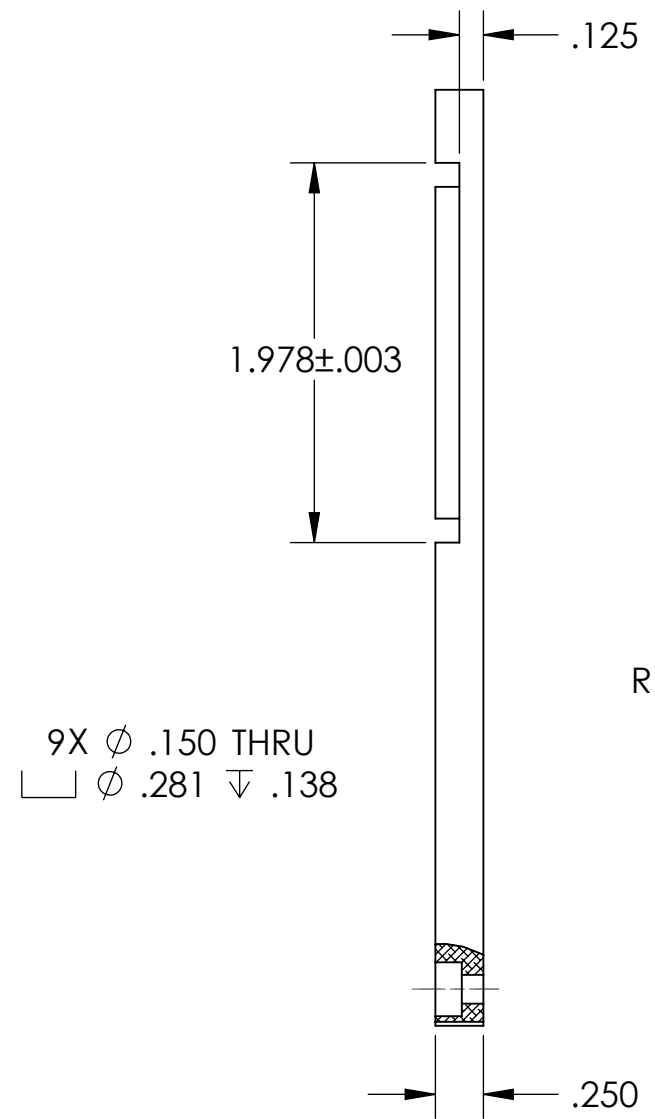
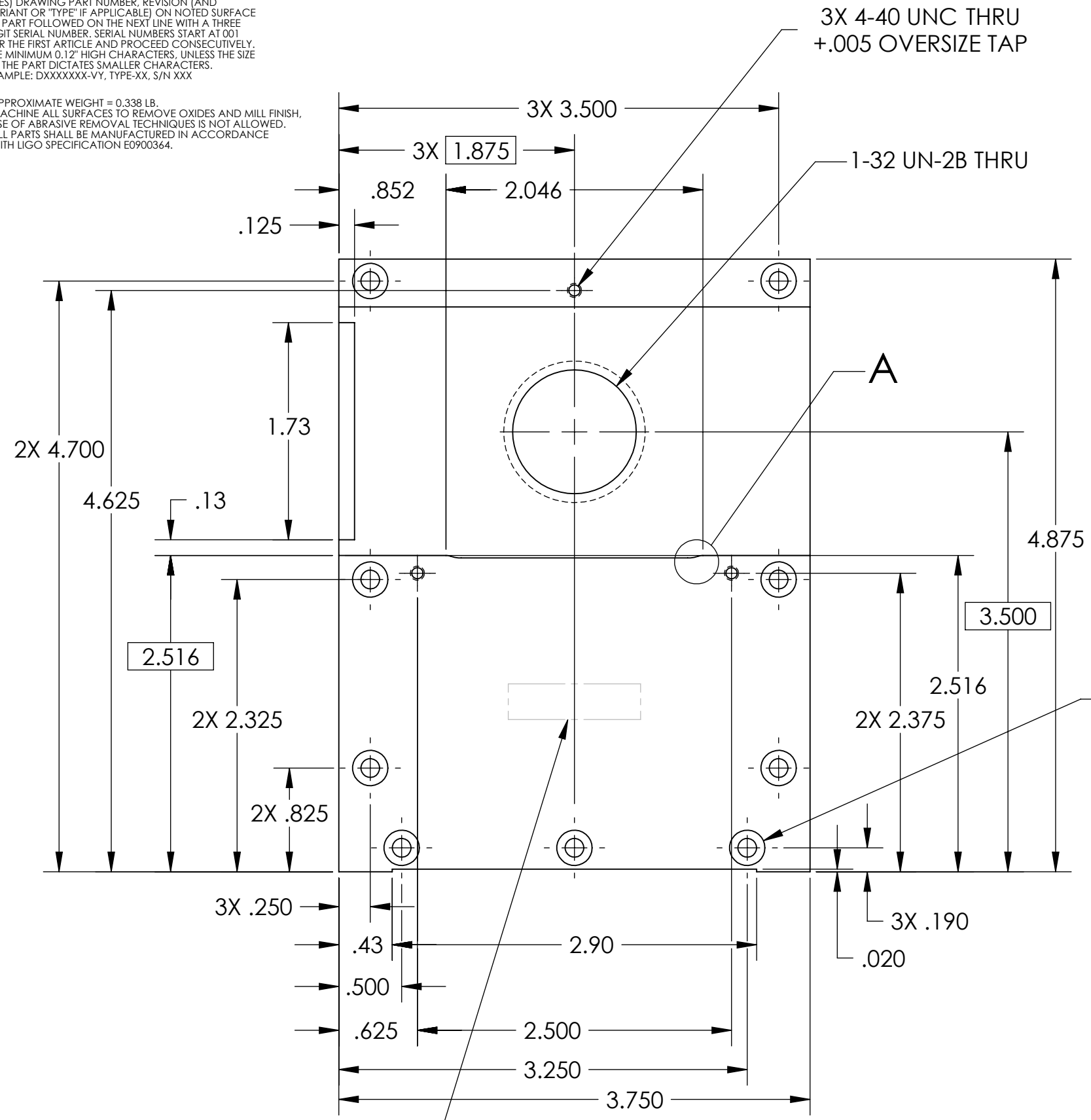
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				ADVANCED LIGO		SUB-SYSTEM		SPRING BLOCK_LH	
TOLERANCES: .XX ± .01 .XXX ± .005				6061-T6 Al		AOS		DESIGNER	TQ. NGUYEN 14 JUL 2010
ANGULAR ± 0.5°				FINISH 63 μinch		NEXT ASSY D0900614		DRAFTER	TQ. NGUYEN 27 AUG 2010
								CHECKER	M. SMITH
								APPROVAL	D. COYNE
								SIZE	DWG. NO. B D1001871
								REV.	v2
								SCALE:	4:1 PROJECTION:
								SHEET 1 OF 1	

D1001915_d1lIGO_AOs_Wedge Window Panel_Input Baffle, PART PDM REV: X-026, DRAWING PDM REV: X-019

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 0.338 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	E1000527
v2	28 FEB 2011	E1000563	E1000527
v3	22 MAR 2011		



DIMENSIONS ARE IN INCHES	
TOLERANCES:	.XX ± .01
	.XXX ± .005
ANGULAR ± 0.5°	

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
1. INTERPRET DRAWING PER ASME Y14.5-1994.	
2. REMOVE ALL SHARP EDGES, R.02 MIN.	
3. DO NOT SCALE FROM DRAWING.	
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	
MATERIAL	6061-T6 Al
FINISH	63 μ inch

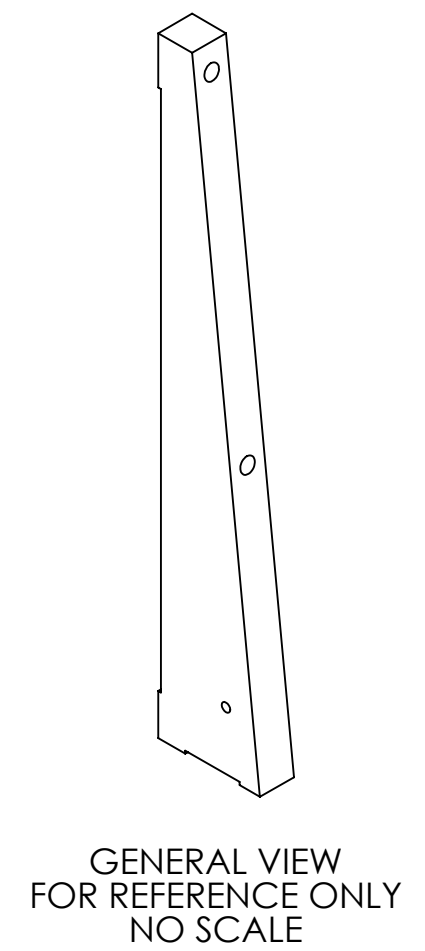
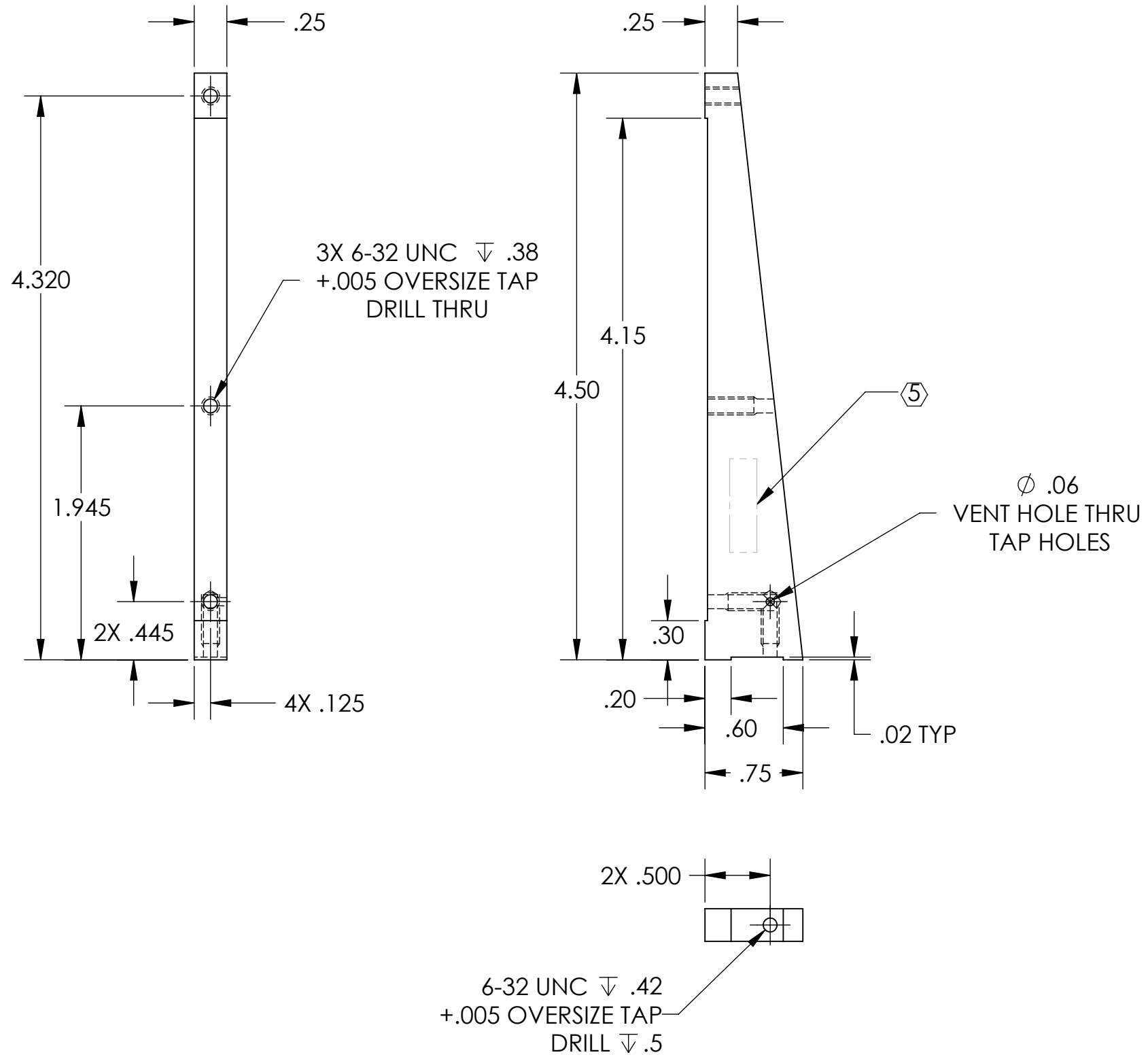
CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
DESIGNER	TQ. NGUYEN	26 JUL 2010	SIZE DWG. NO.
DRAFTER	TQ. NGUYEN	23 AUG 2010	B
CHECKER	M. SMITH		D1001915
APPROVAL	D. COYNE		REV. v3
SCALE: 1:1		PROJECTION:	
		SHEET 1 OF 1	

D1001916_d1lGO_AOs_Wedge Window Side Support, PART PDM REV: X-011, DRAWING PDM REV: X-012

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 0.053 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	E1000527
v2	28 FEB 2011	E1000563	E1000527
v3	22 MAR 2011	-	-



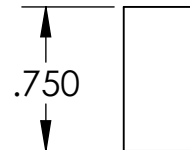
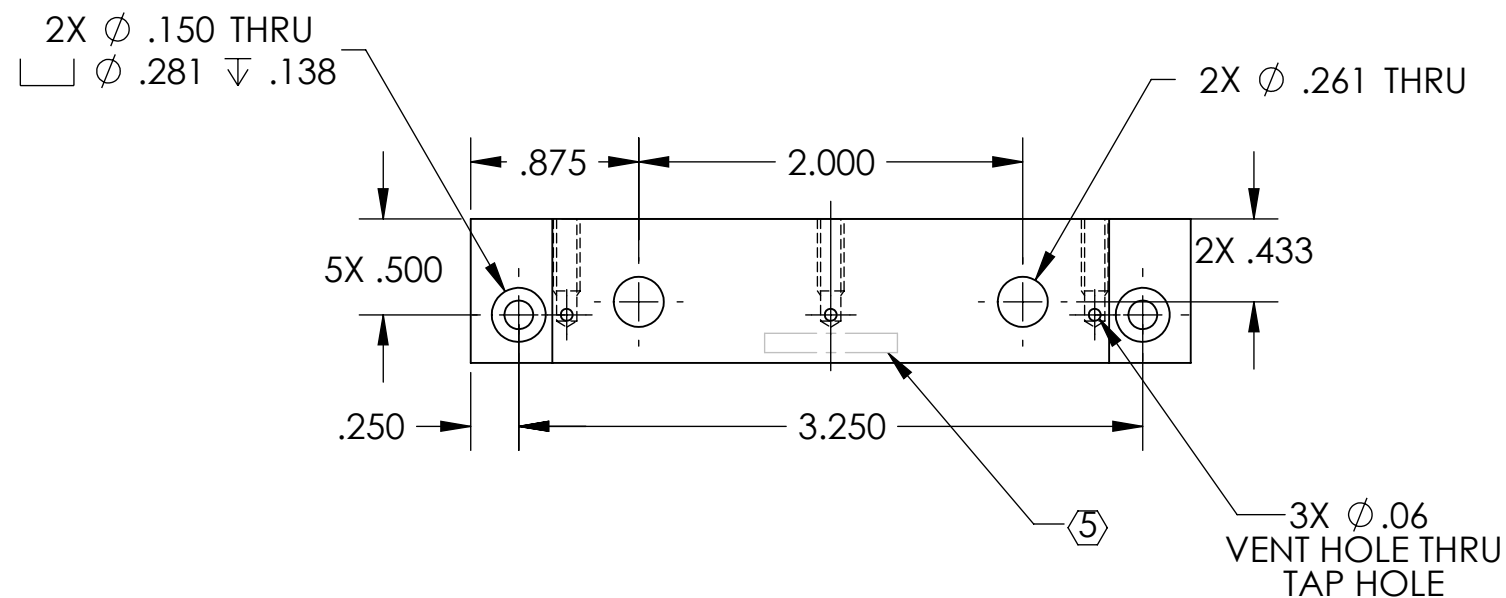
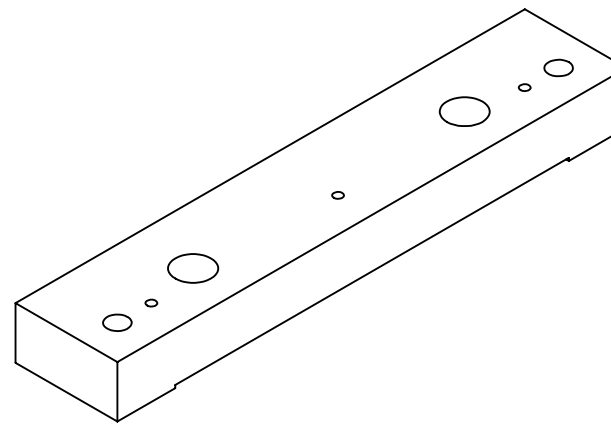
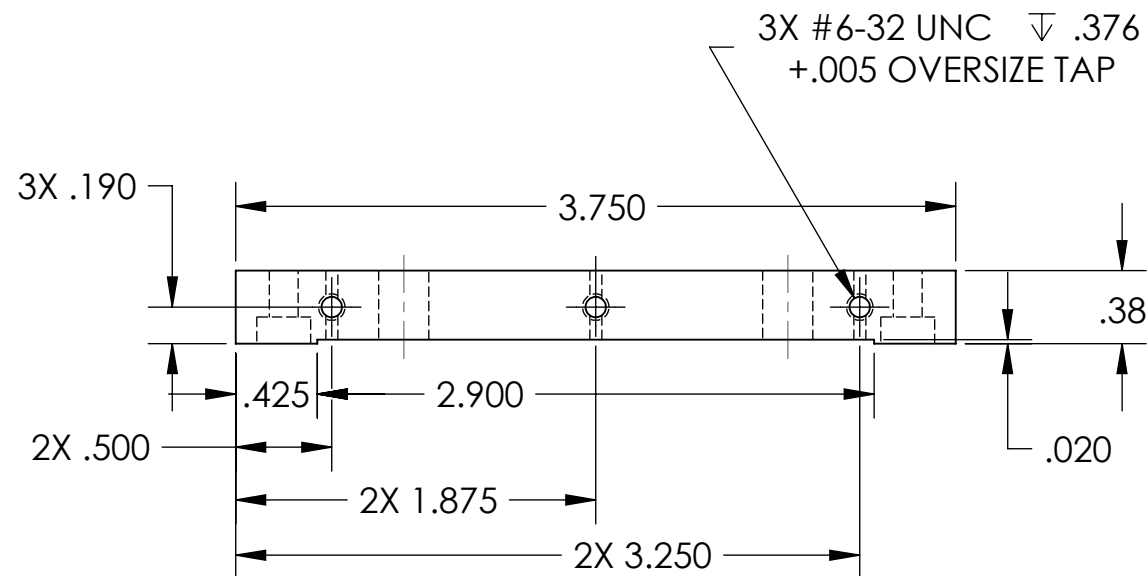
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				ADVANCED LIGO		INPUT BAFFLE SIDE SUPPORT	
TOLERANCES: .XX \pm .01 .XXX \pm .005				SUB-SYSTEM AOS		DESIGNER	TQ. NGUYEN 27 JUL 2010
ANGULAR \pm 0.5°				NEXT ASSY D1001918		DRAFTER	TQ. NGUYEN 24 AUG 2010
MATERIAL 6061-T6 Al				FINISH 63 μ inch		CHECKER	M. SMITH
						APPROVAL	D. COYNE
						SCALE: 1:1	PROJECTION:
						SIZE DWG. NO.	D1001916
						REV.	v3
						SHEET 1 OF 1	

NOTES CONTINUED:

5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

- 6. APPROXIMATE WEIGHT = 0.096 LB.
- 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
- 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	-
v2	23 MAR 2011	E1000563	-
-	-	-	-



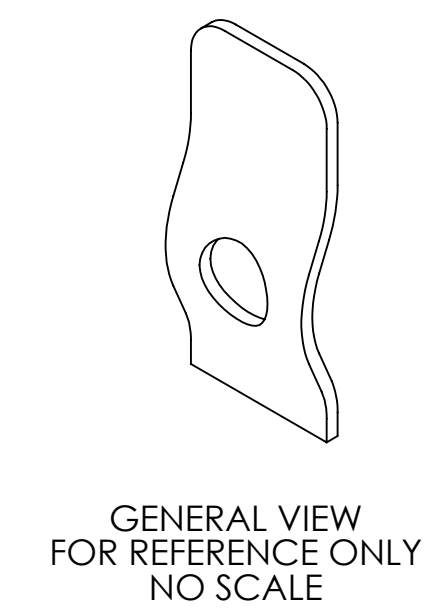
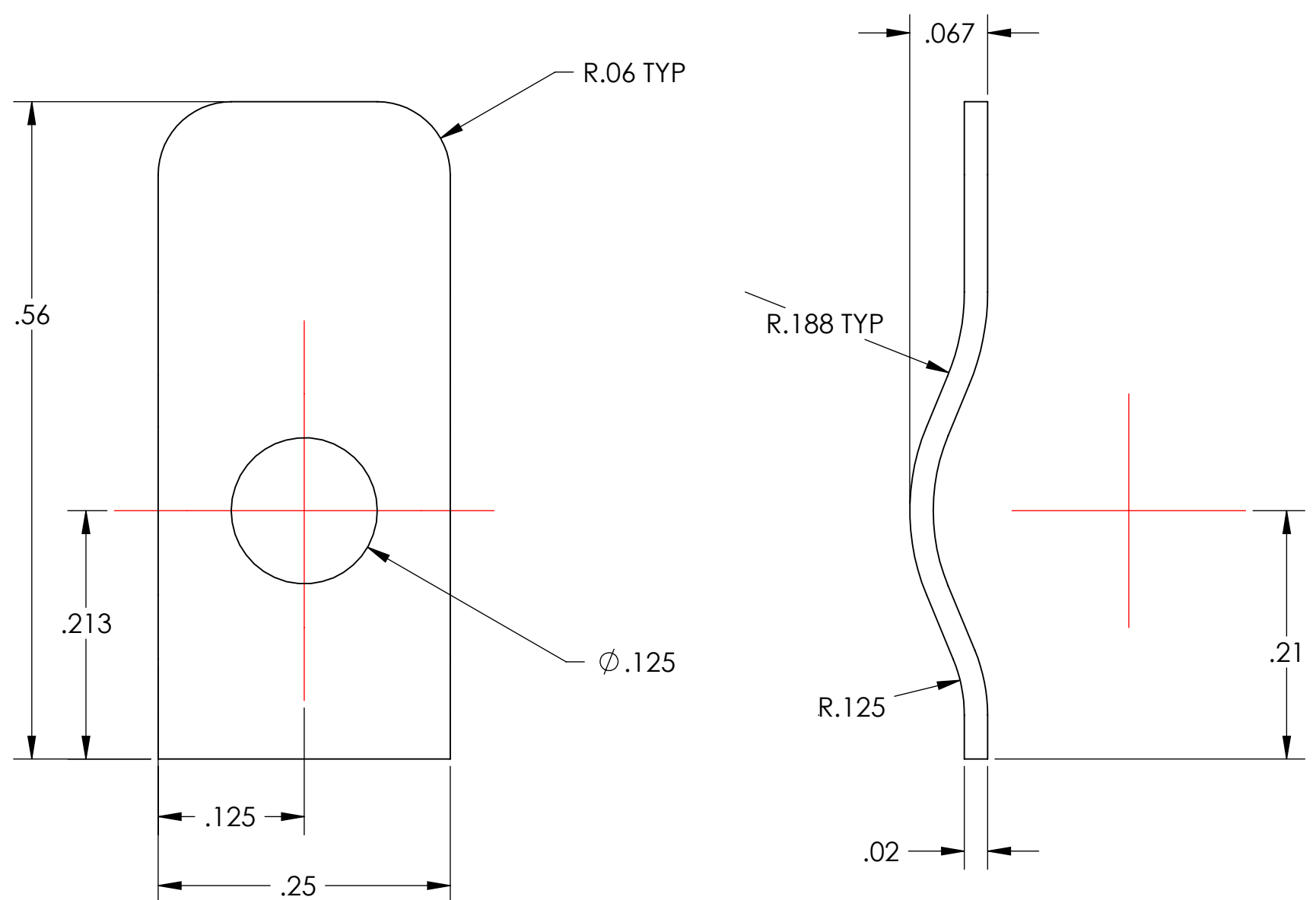
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				ADVANCED LIGO		INPUT BAFFLE BASE	
TOLERANCES: .XX \pm .01 .XXX \pm .005				SUB-SYSTEM AOS		DESIGNER	TQ. NGUYEN 27 JUL 2010
ANGULAR \pm 0.5°				NEXT ASSY D1001918		DRAFTER	TQ. NGUYEN 24 AUG 2010
MATERIAL 6061-T6 Al				FINISH 63 μ inch		CHECKER	M. SMITH
						APPROVAL	D. COYNE
						SIZE	DWG. NO. D1001917
						REV.	v2
						SCALE: 1:1	PROJECTION: SHEET 1 OF 1

D1001919_d1lgo_aos_dog_clamp_wedge_window_input_baffle_part_pdm_rev: x-009, drawing_pdm_rev: x-003

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

6. APPROXIMATE WEIGHT = 0.001 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	E1000527
-	-	-	-
-	-	-	-



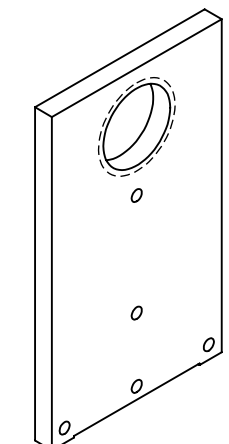
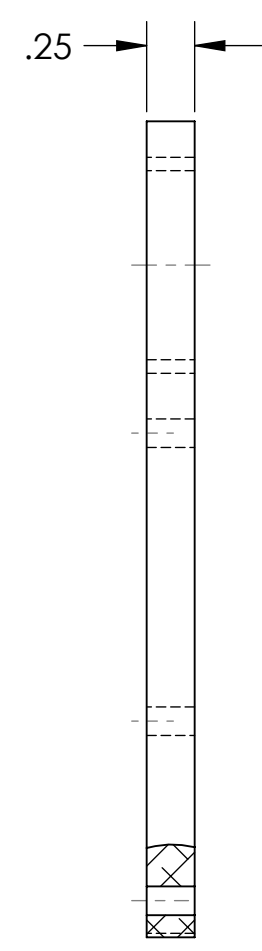
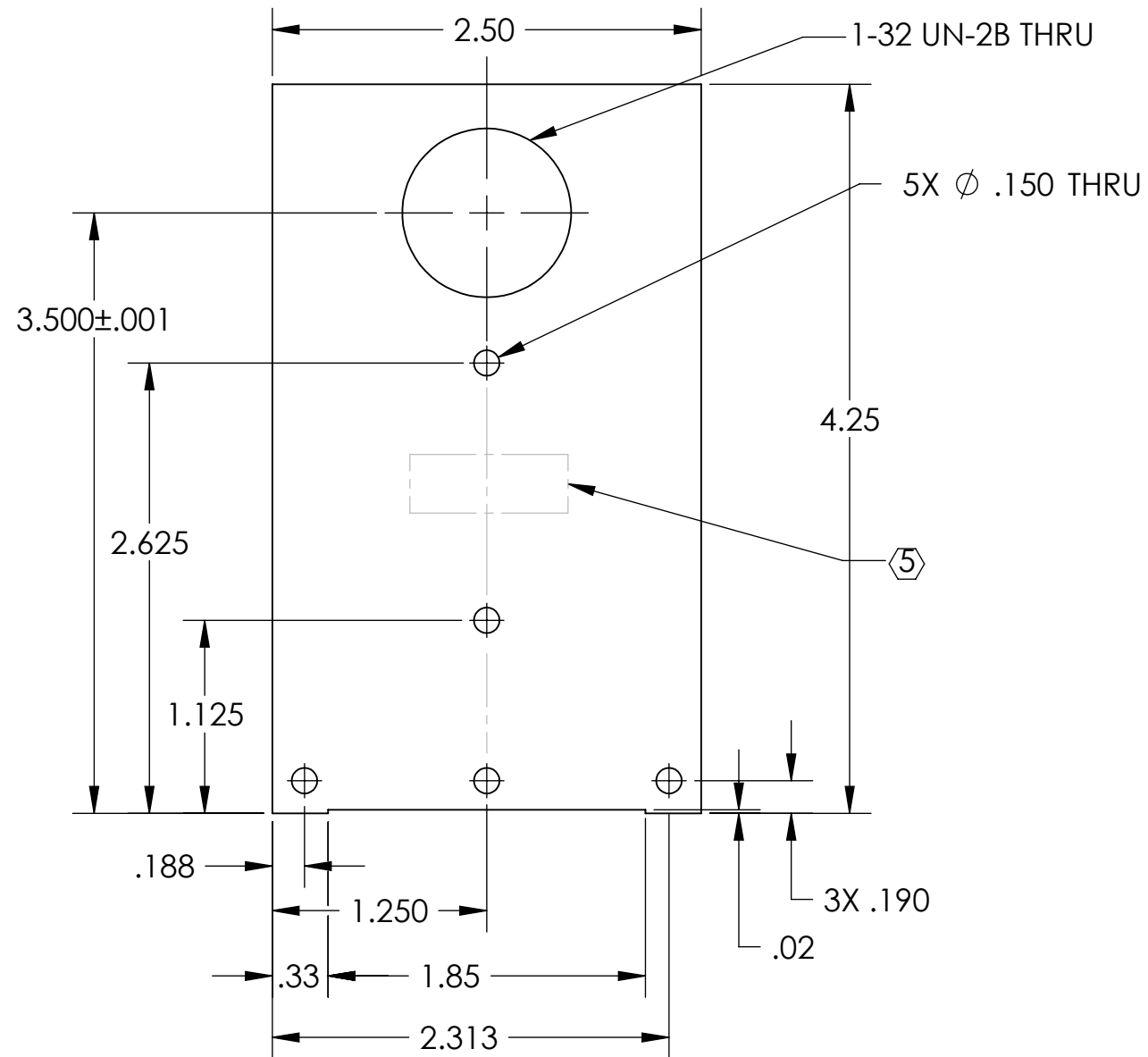
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				ADVANCED LIGO		BEAM DUMP MOUNTING CLAMP	
TOLERANCES: .XX ± .01 .XXX ± .005				SUB-SYSTEM AOS		DESIGNER	TQ. NGUYEN 2 AUG 2010
ANGULAR ± 0.5°				NEXT ASSY D1001918		DRAFTER	TQ. NGUYEN 24 AUG 2010
MATERIAL 304 SSSL				FINISH 63 μinch		CHECKER	M. SMITH
						APPROVAL	D. COYNE
						SIZE	DWG. NO. B D1001919
						SCALE	8:1
						PROJECTION	1st Angle
						SHEET	1 OF 1
						REV.	v1

D1001959_d1lGO_AOs_Wedge Window Panel_OUTPUT BAFFLE, PART PDM REV: X-015, DRAWING PDM REV: X-013

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	-
v2	21 MAR 2011	-	-
-	-	-	-



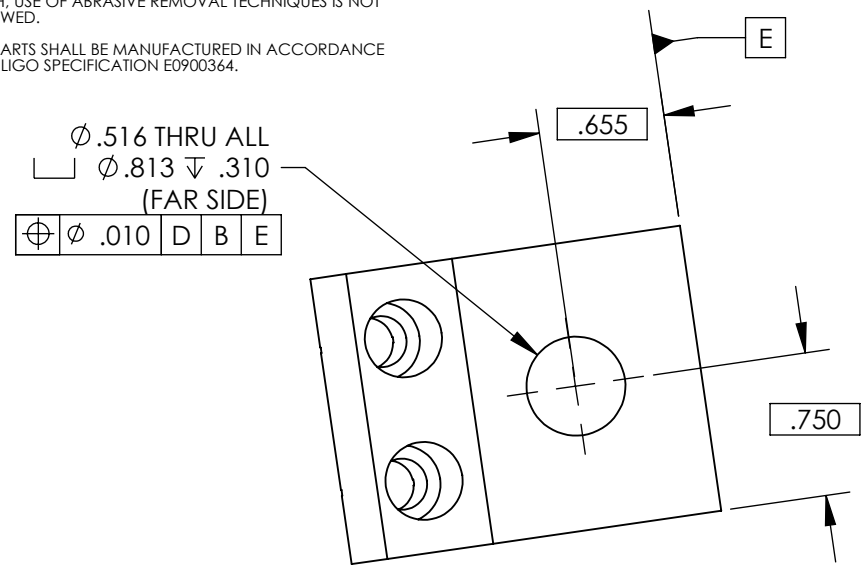
GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		RETICLE HOLDER	
						MATERIAL 6061-T6 Al FINISH 63 μinch	
				SYSTEM ADVANCED LIGO SUB-SYSTEM AOS		SIZE DWG. NO. B D1001959	
				NEXT ASSY D1001963		REV. v2	
				SCALE: 1:1 PROJECTION:		SHEET 1 OF 1	

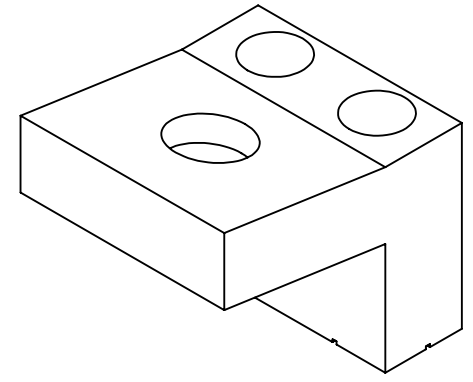
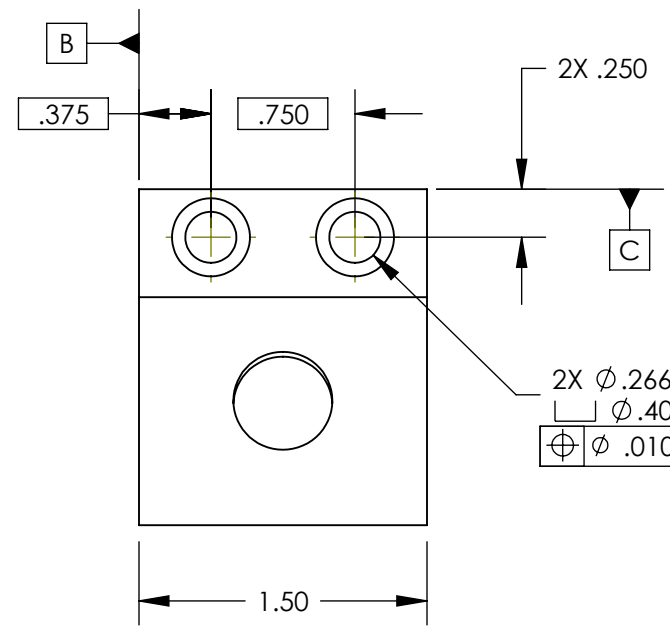
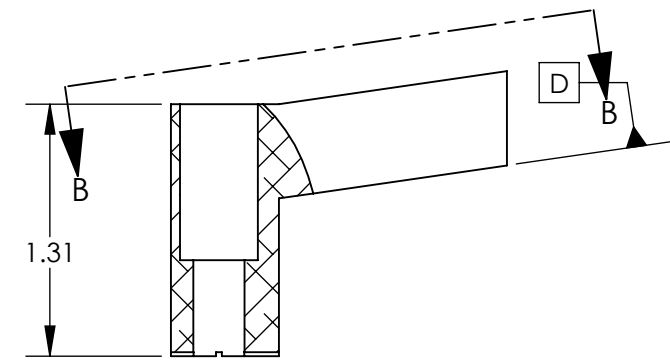
NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

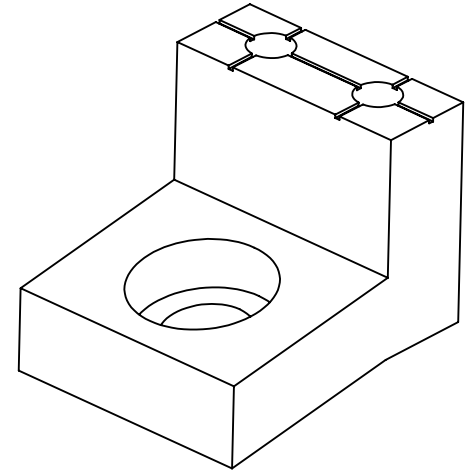
REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	
v2	21 MAR 2011	E1000563	



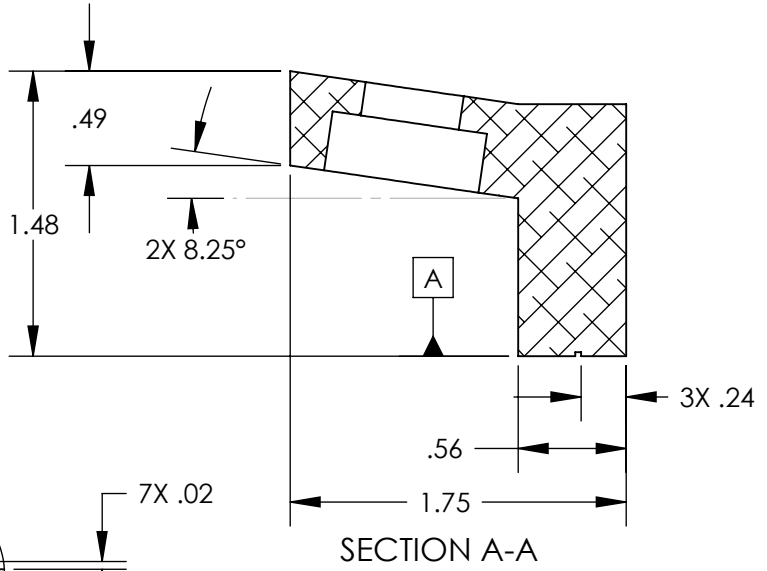
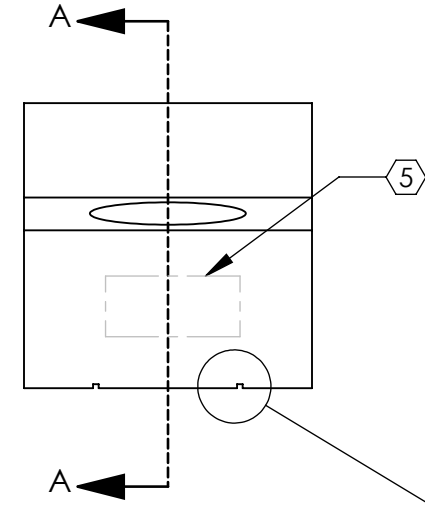
VIEW B-B



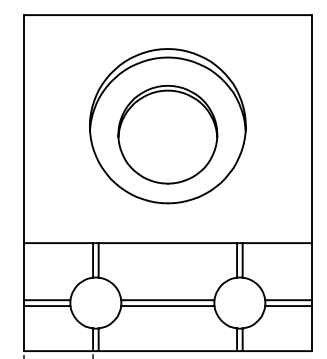
(TOP VIEW)



(BOTTOM VIEW)



SECTION A-A



DETAIL C
SCALE 2 : 1

4X .36

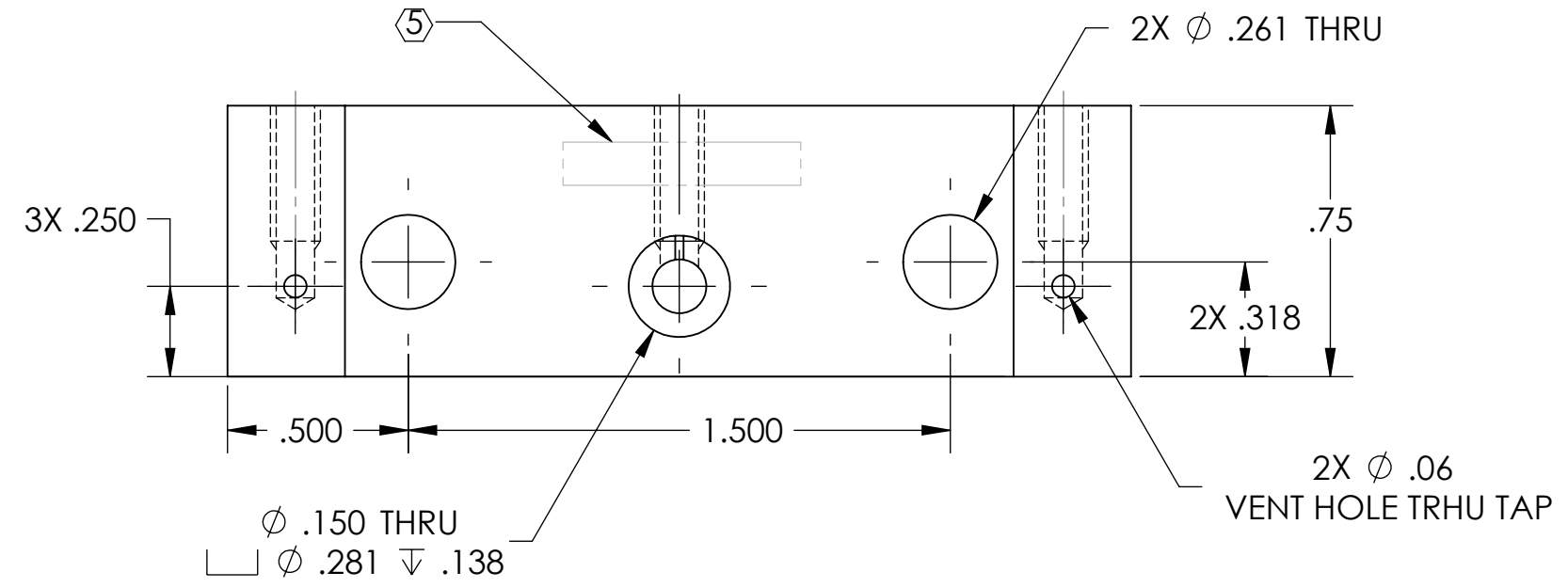
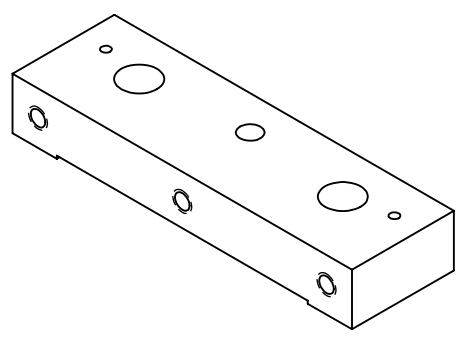
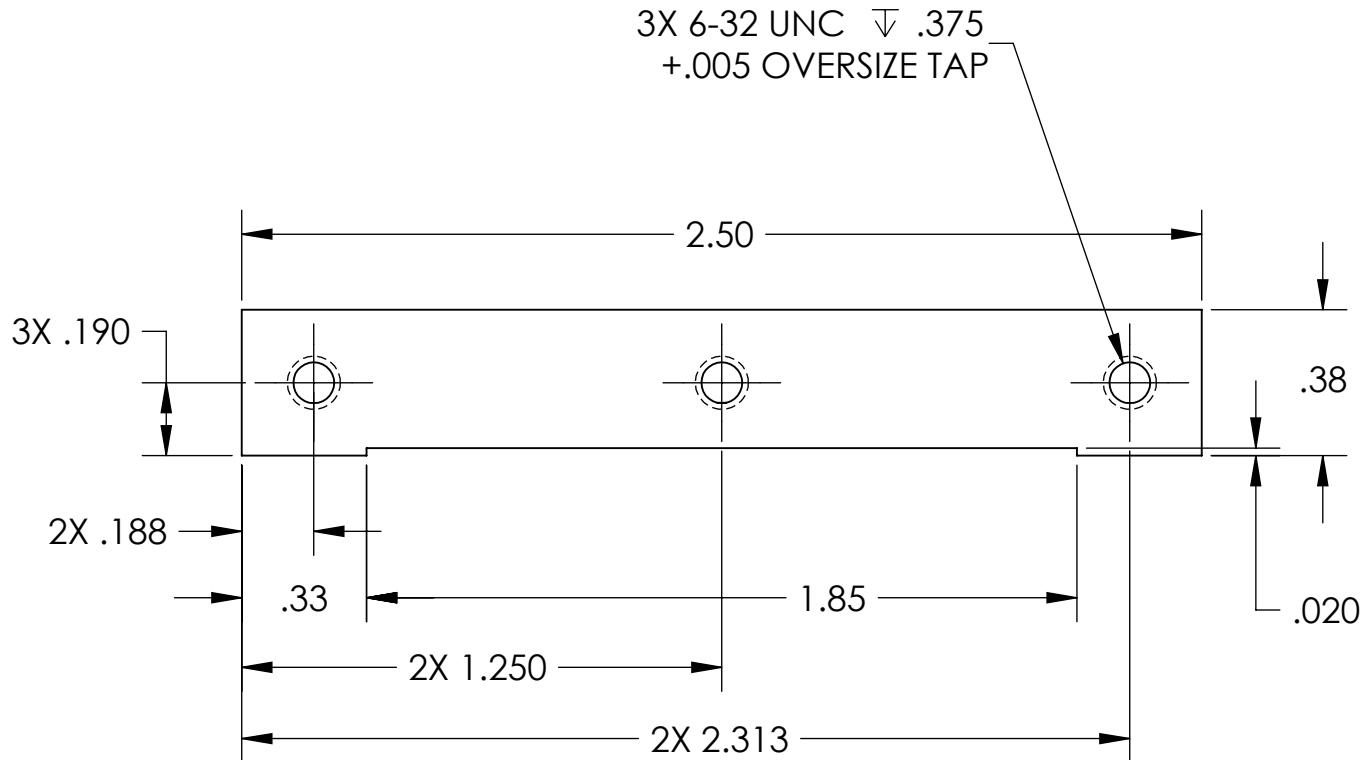
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .02 .XXX ± .010 ANGULAR ± 5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		WIRE SUPPORT BLOCK	
MATERIAL		FINISH		NEXT ASSY		DESIGNER	
6061-T6 Al		63 μinch		D1001958		DRAFTER	
						CHECKER	
						APPROVAL	
				SIZE DWG. NO.		REV.	
				B D1001960		v2	
				SCALE: 1:1		PROJECTION:	
						SHEET 1 OF 1	

D1001960_alIGO_AOS_D0901958_Wire Support Block, PART PDM REV: X-009, DRAWING PDM REV: X-010

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 0.044 LB.
 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	E1000531
v2	28 FEB 2011	E1000563	E1000531
v3	20 MAR 2011	-	-



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX \pm .01 .XXX \pm .005 ANGULAR \pm 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		OUTPUT ALIGNMENT FIXTURE BASE	
MATERIAL		FINISH		NEXT ASSY		DESIGNER TQ. NGUYEN 27 JUL 2010 DRAFTER TQ. NGUYEN 25 AUG 2010 CHECKER M. SMITH APPROVAL D. COYNE	
6061-T6 Al		63 μ inch		D1001963		SIZE DWG. NO. B D1001961 REV. v3	
				SCALE: 2:1		PROJECTION: SHEET 1 OF 1	

D1001961_d1lgo_Wedge WindowPlatform_OUTPUT BAFFLE, PART PDM REV: X-008, DRAWING PDM REV: X-011

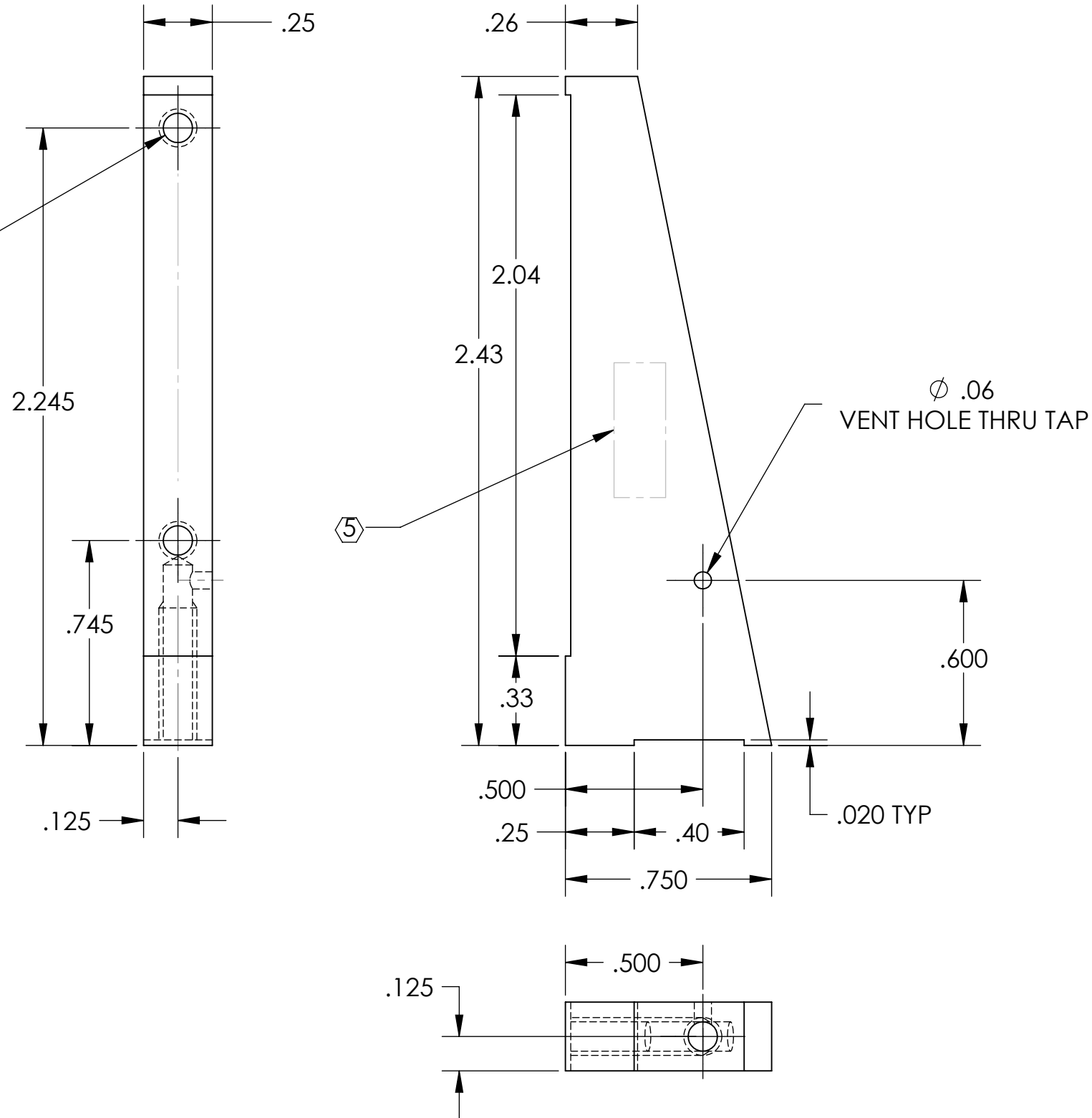
D1001962_d1lIGO_AOs_Wedge Window Middle Support_Output Baffle, PART PDM REV: X-011, DRAWING PDM REV: X-014

NOTES CONTINUED:
5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = 0.029 LB.
7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	E1000531
v2	28 FEB 2011	E1000563	E1000531
v3	20 MAR 2011	-	-
v4	30 MAR 2011	-	-

3X #6-32 UNC ∇ .500
+.005 OVERSIZE TAP
DRILL THRU



GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES
TOLERANCES:
.XX \pm .01
.XXX \pm .005
ANGULAR \pm 0.5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, R.02 MIN.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL 6061-T6 Al FINISH 63 μ inch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM ADVANCED LIGO SUB-SYSTEM AOS

NEXT ASSY D1001963

PART NAME OUTPUT ALIGNMENT FIXTURE SUPPORT

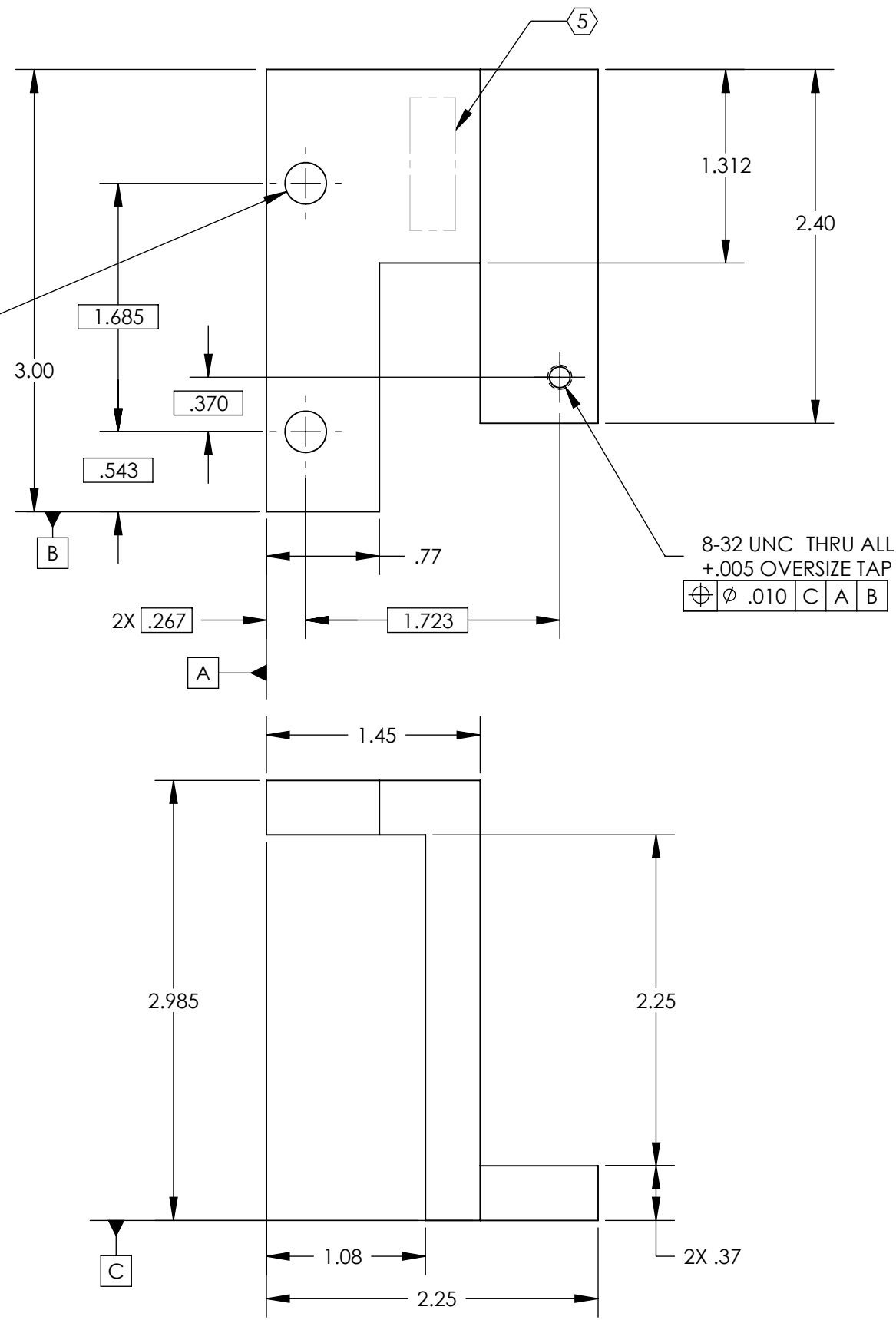
DESIGNER	TQ. NGUYEN	27 JUL 2010	SIZE	DWG. NO.	REV.
DRAFTER	TQ. NGUYEN	25 AUG 2010	B	D1001962	v4
CHECKER	M. SMITH		SCALE:	2:1	PROJECTION:
APPROVAL	D. COYNE				SHEET 1 OF 1

D1002112_Magnetic Plate Mounting Back (Lowered) Bracket, PART PDM REV: X-006, DRAWING PDM REV: X-010

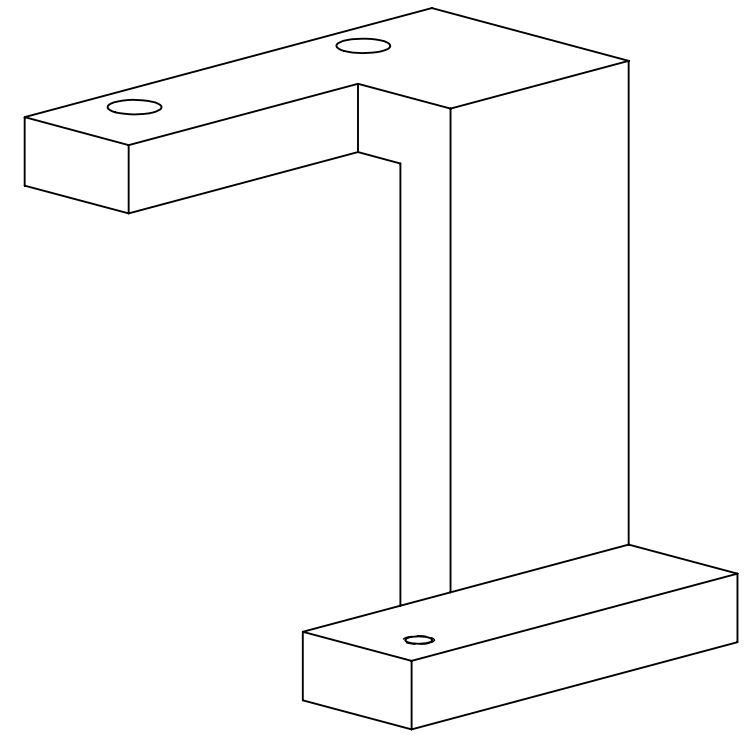
- NOTES CONTINUED:**
- 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 - 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 - 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	
v2	28 FEB 2011	E1000563	

2X ϕ .281 THRU ALL
 ϕ .010 C A B



8-32 UNC THRU ALL
 +.005 OVERSIZE TAP
 ϕ .010 C A B



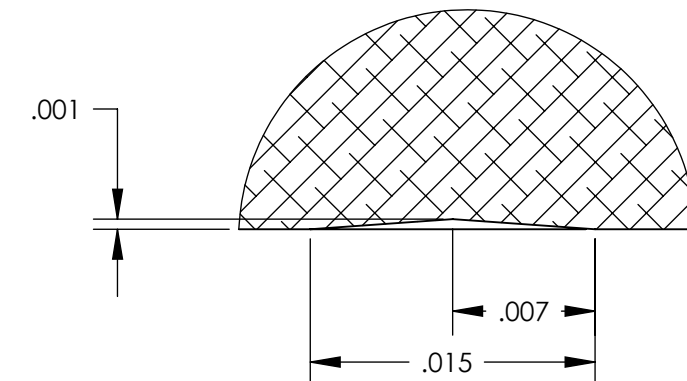
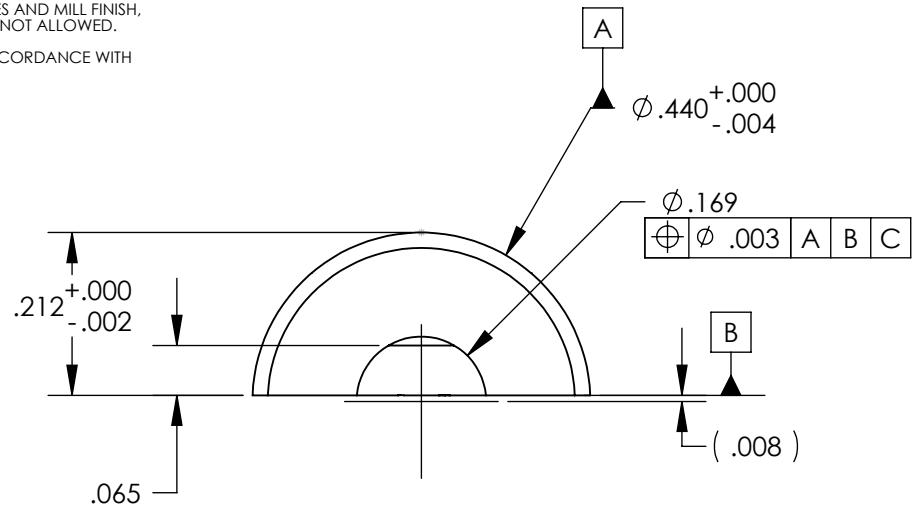
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .02 .XXX ± .010 ANGULAR ± .5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		MAGNETIC PLATE MOUNTING BACK (LOWER) BRACKET	
MATERIAL 6061-T6 Al				FINISH 63 μinch		SYSTEM ADVANCED LIGO SUB-SYSTEM AOS	
NEXT ASSY D0900048				DESIGNER MRUIZ		DATE 16 AUG 2010	
				CHECKER		SIZE DWG. NO. B	
				APPROVAL		REV. v2	
				SCALE: 1:1		PROJECTION:	
				SHEET 1 OF 1			

NOTES CONTINUED:

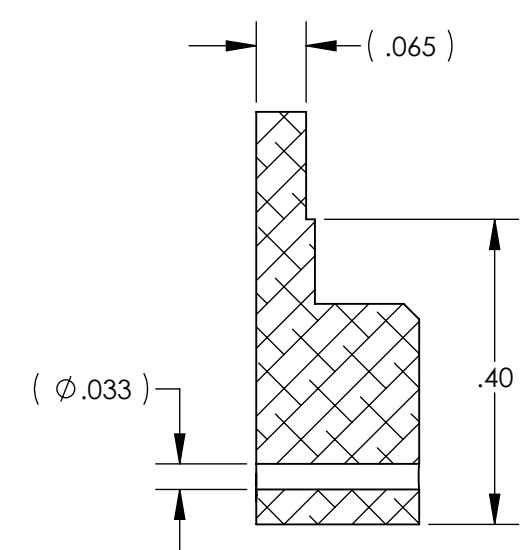
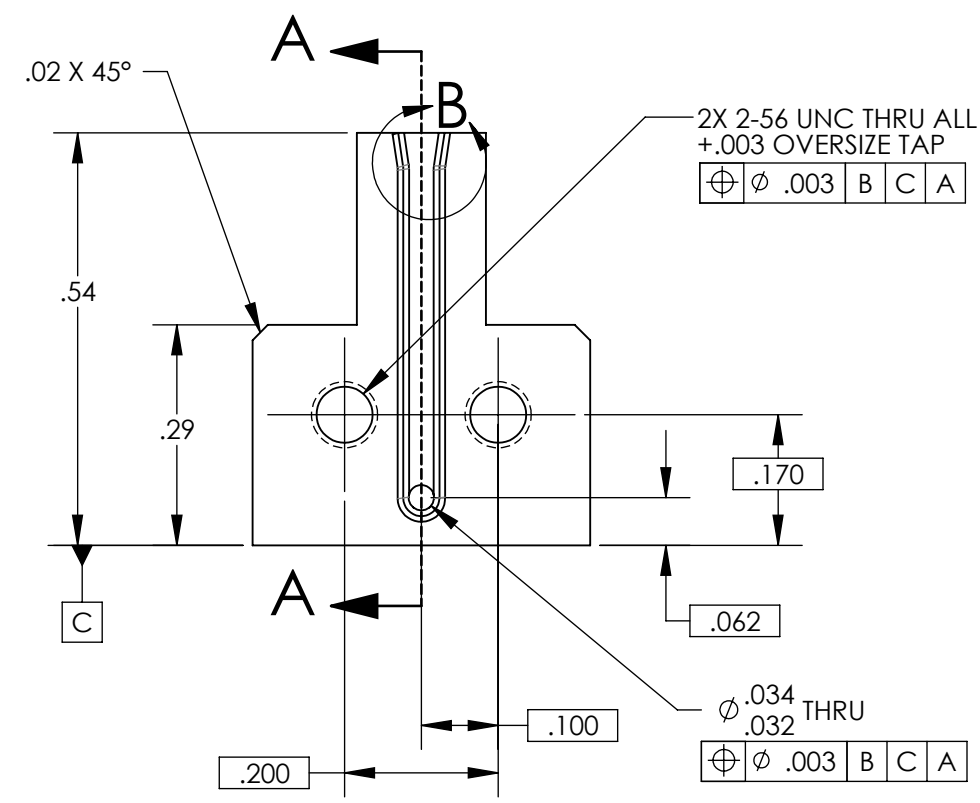
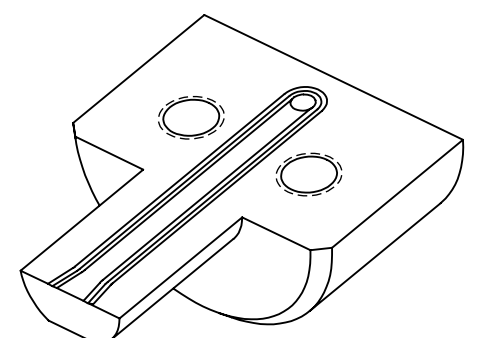
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

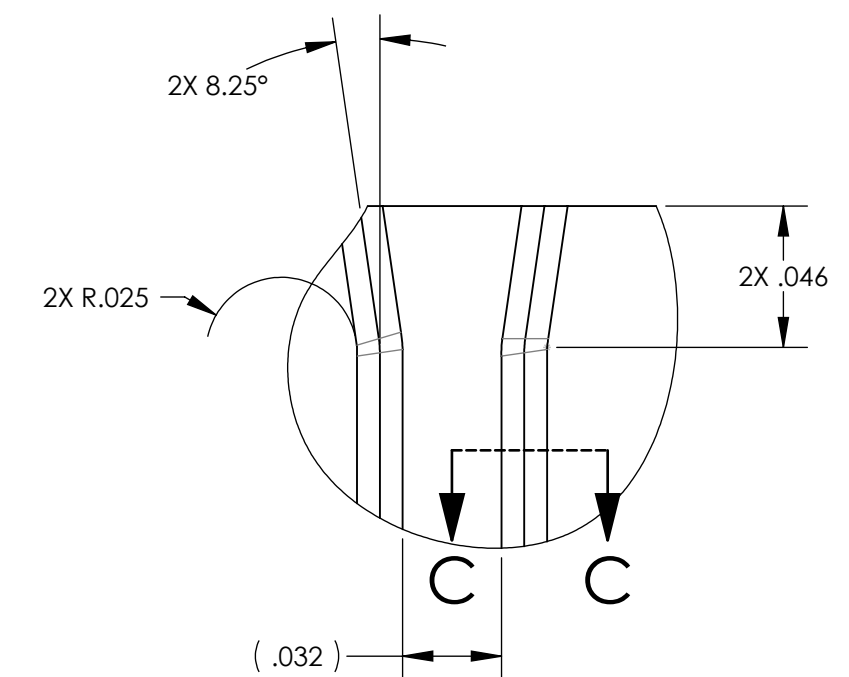
REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	
v2	28 FEB 2011	E1000563	



DETAIL C
SCALE 100 : 1



SECTION A-A



DETAIL B
SCALE 16 : 1

D1002168_AdlIGO_AOS_Music Wire Split Clamp 3, PART PDM REV: X-009, DRAWING PDM REV: X-008

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .005 .XXX ± .002 ANGULAR ± .5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		MUSIC WIRE SPLIT CLAMP 3	
MATERIAL 304, 316 OR 302 SSSL		FINISH 63 μinch		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
NEXT ASSY D0900586				DESIGNER M.RUIZ		DATE 24 SEP 2010	
				CHECKER		SIZE DWG. NO. B D1002168	
				APPROVAL		REV. v2	
				SCALE: 4:1		PROJECTION: SHEET 1 OF 1	

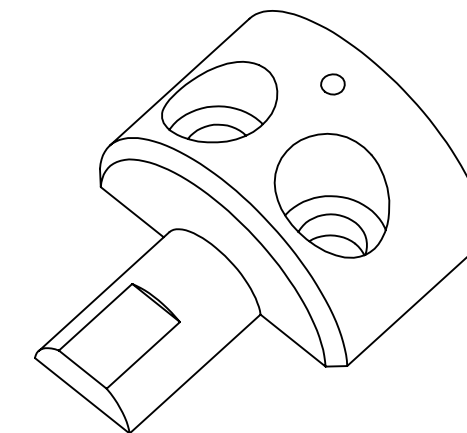
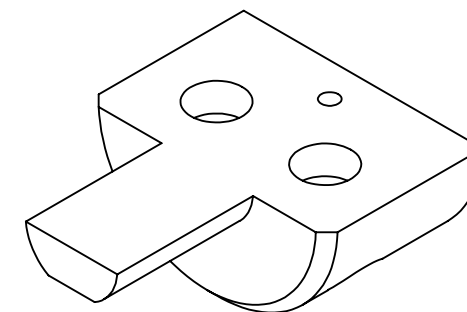
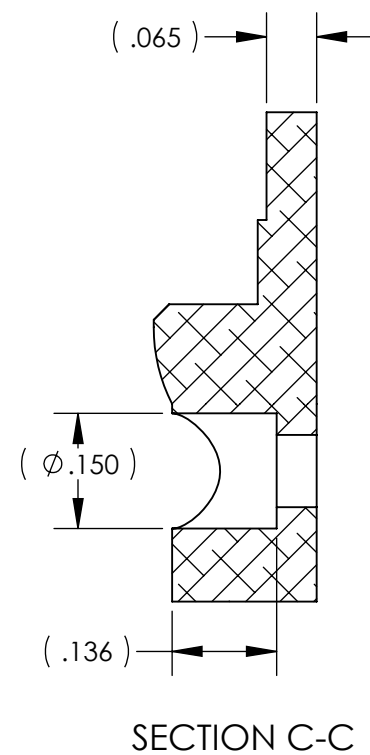
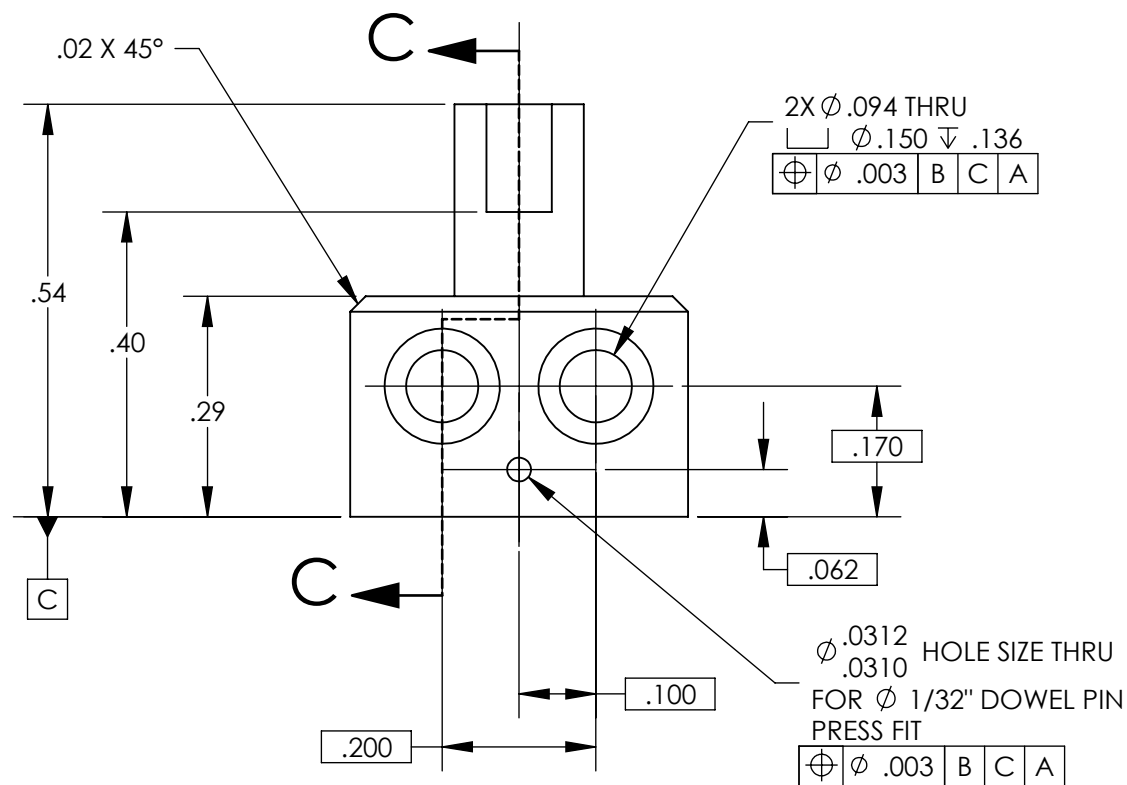
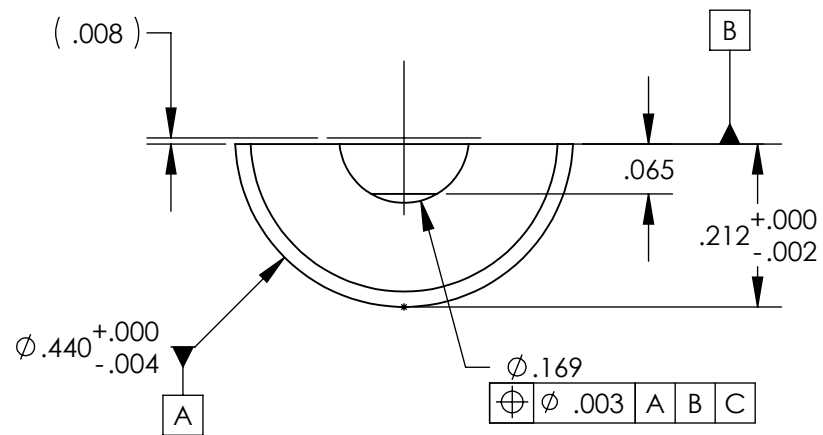
NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

D 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	



D1002169_AdlIGO_AOS_D0900586_Music Wire Split Clamp 4, PART PDM REV: X-002, DRAWING PDM REV: X-007

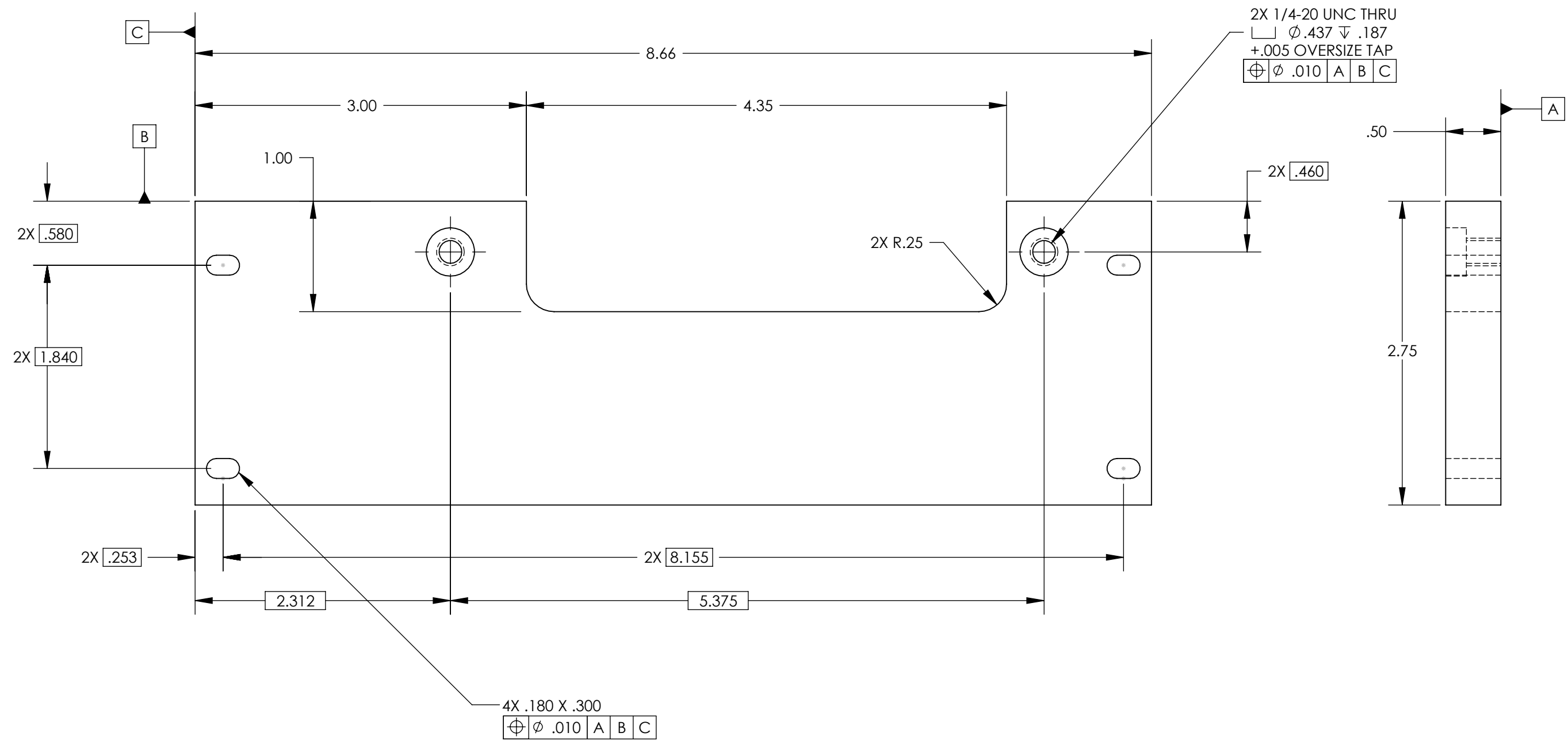
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .005 .XXX ± .002 ANGULAR ± .5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		MUSIC WIRE SPLIT CLAMP 4	
MATERIAL 304, 316 OR 302 SSSL		FINISH 63 μinch		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
NEXT ASSY D0900586				DESIGNER M.RUIZ		DATE 24 SEP 2010	
				CHECKER		SIZE DWG. NO. B D1002169	
				APPROVAL		REV. v1	
				SCALE: 4:1		PROJECTION:	
				SHEET 1 OF 1			

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	
v2	28 FEB 2011	E1000563	

D
C
B
A

D
C
B
A



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .02 .XXX ± .010 ANGULAR ± .5°				CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		CROSSBAR PLATE_IN	
				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SYSTEM: ADVANCED LIGO SUB-SYSTEM: AOS	
MATERIAL: 6061-T6 Al FINISH: 63 μinch				NEXT ASSY: D1002256		DRAFTER: MRUIZ 08/25/2010 B D1002257	
						CHECKER: APPROVAL: SCALE: 1:1 PROJECTION: SHEET 1 OF 1	
						REV. v2	

D1002257_ALIGO_AOS_D100256_Crossbar Plate_In, PART PDM REV: X-005, DRAWING PDM REV: X-010

D1002362_alIGO_AOS_D0900623_Faraday Isolator Beam Dump Mount, PART PDM REV: X-007, DRAWING PDM REV: X-015

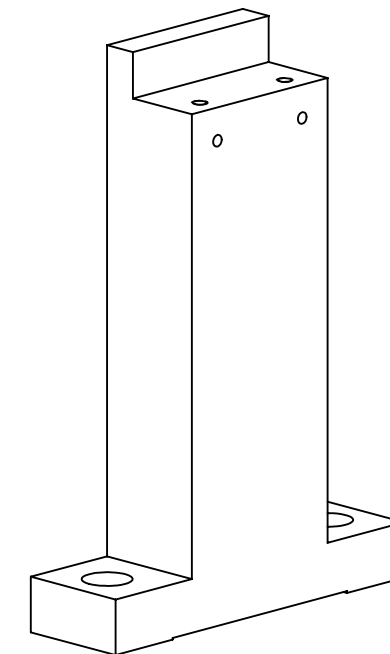
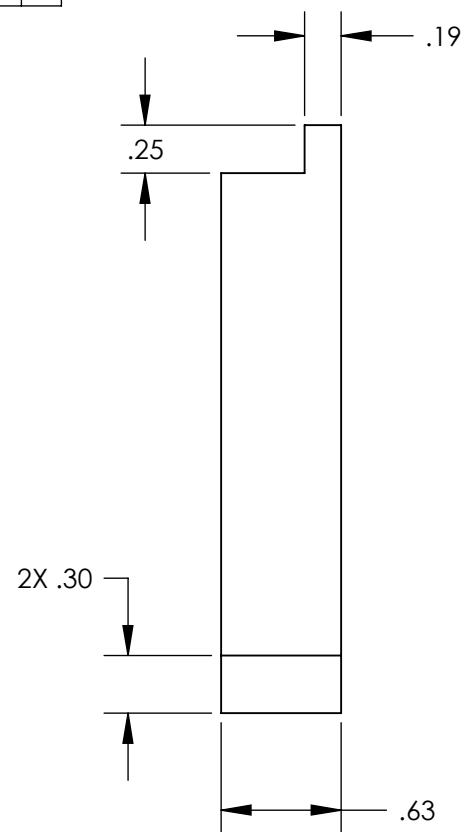
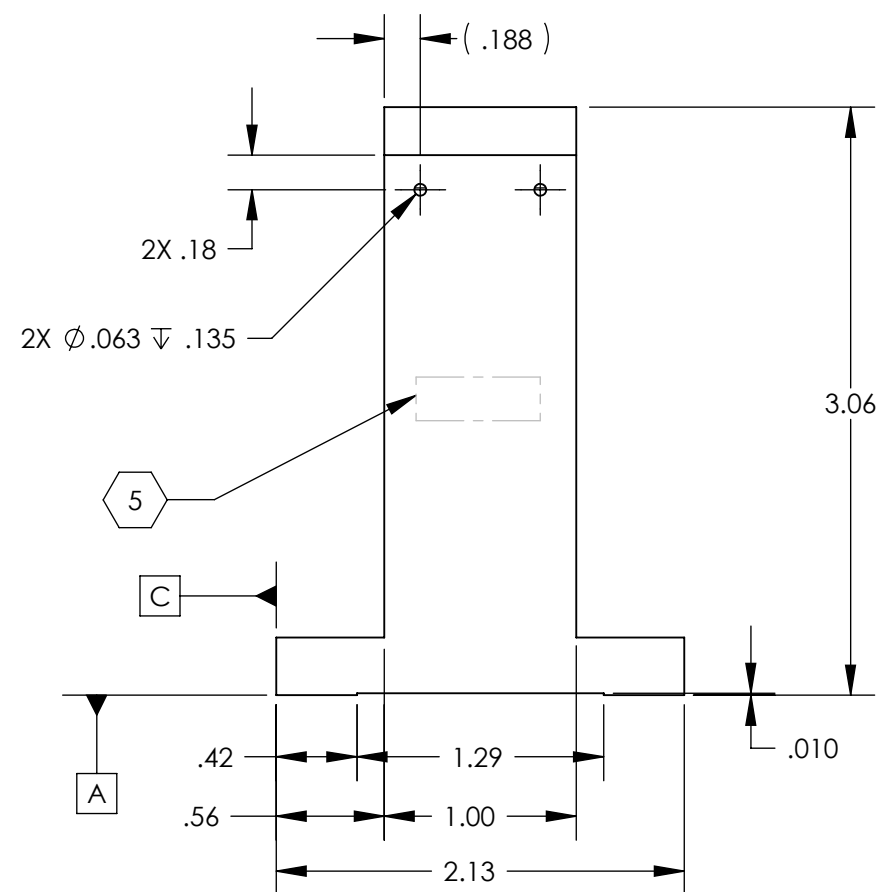
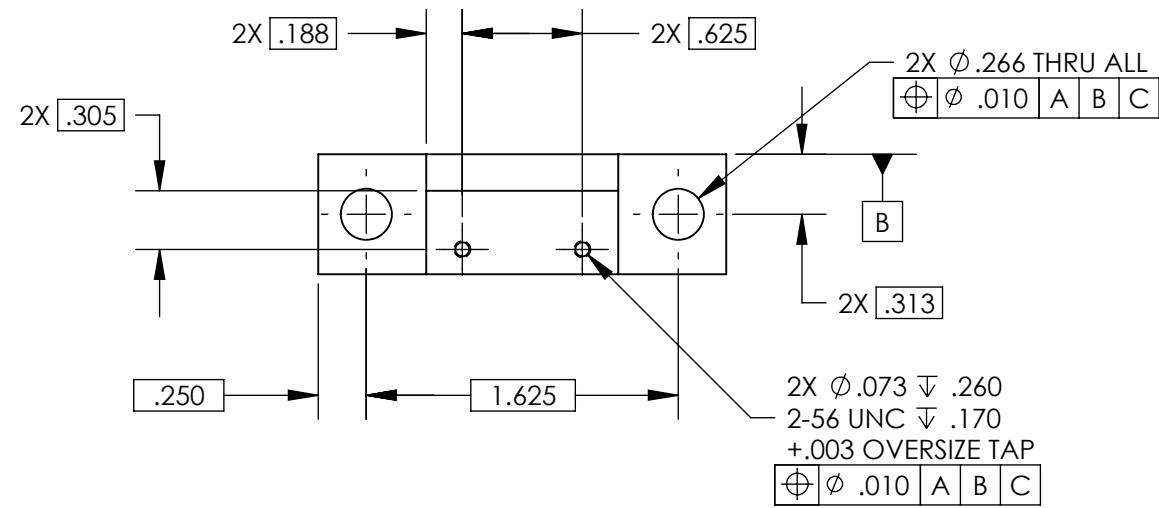
8 7 6 5 4 3 2 1

NOTES CONTINUED:
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	
v2	28 FEB 2011	E1000563	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN
TOLERANCES:
.XX \pm .02
.XXX \pm .010
ANGULAR \pm .5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, R.02 MIN.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL 6061-T6 Al FINISH 63 μ inch

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SYSTEM ADVANCED LIGO SUB-SYSTEM AOS

NEXT ASSY D1002364

PART NAME FARADAY ISOLATOR BEAM DUMP MOUNT

DESIGNER	MRUIZ	09 SEP 2010	SIZE DWG. NO.	REV.
DRAFTER			B	D1002362
CHECKER				v2
APPROVAL			SCALE: 1:1	PROJECTION: SHEET 1 OF 1

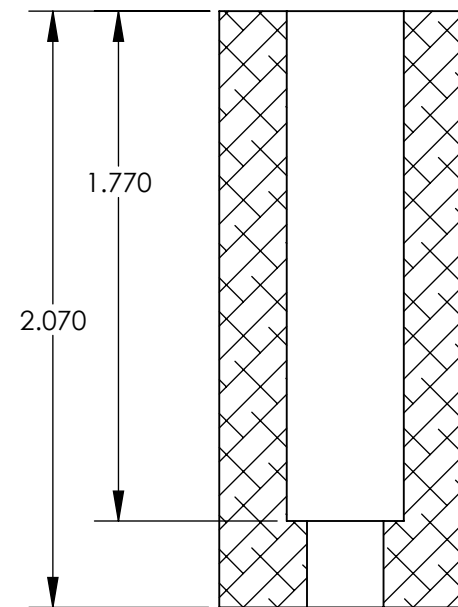
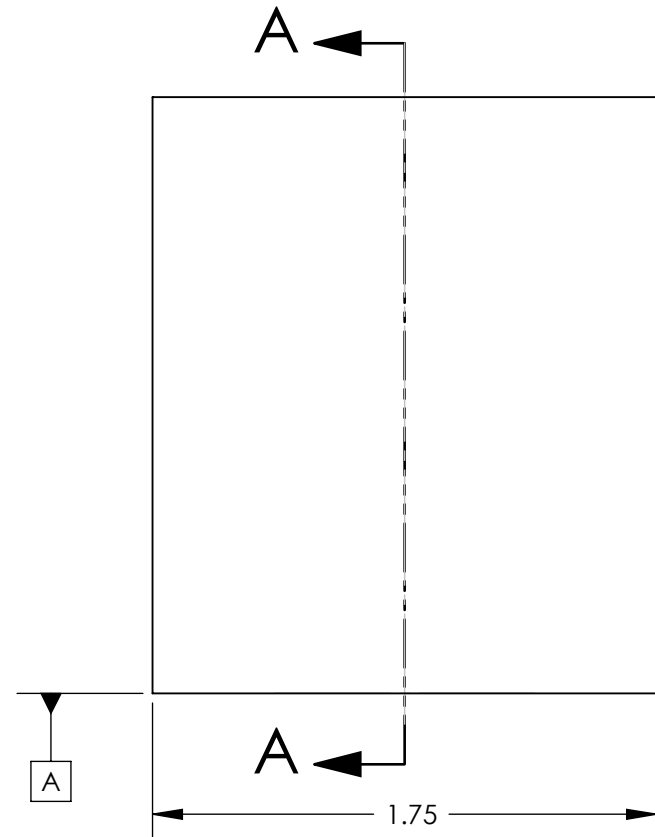
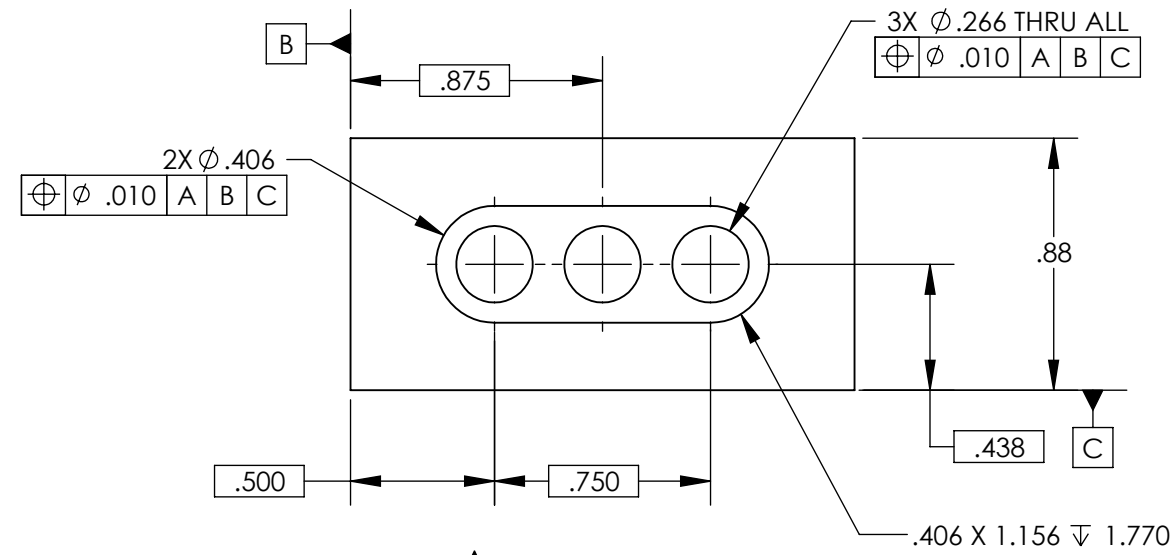
8 7 6 5 4 3 2 1

D1002533_ALIGO_AOS_Output Faraday Isolator Dummy Weight, PART PDM REV: X-004, DRAWING PDM REV: X-002

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
 7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-



SECTION A-A

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN	
TOLERANCES:	
.XX	± .02
.XXX	± .010
ANGULAR ± .5°	
1. INTERPRET DRAWING PER ASME Y14.5-1994.	
2. REMOVE ALL SHARP EDGES, R.02 MIN.	
3. DO NOT SCALE FROM DRAWING.	
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	
MATERIAL	FINISH
304, 316 OR 302 SSTL	63 μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM SUB-SYSTEM

NEXT ASSY D0900623

PART NAME
Output Faraday Isolator Dummy Weight

DESIGNER	M.RUIZ	01 OCT 2010	SIZE DWG. NO.	REV.
DRAFTER			B	D1002533
CHECKER				v1
APPROVAL			SCALE: 3:2	PROJECTION: SHEET 1 OF 1

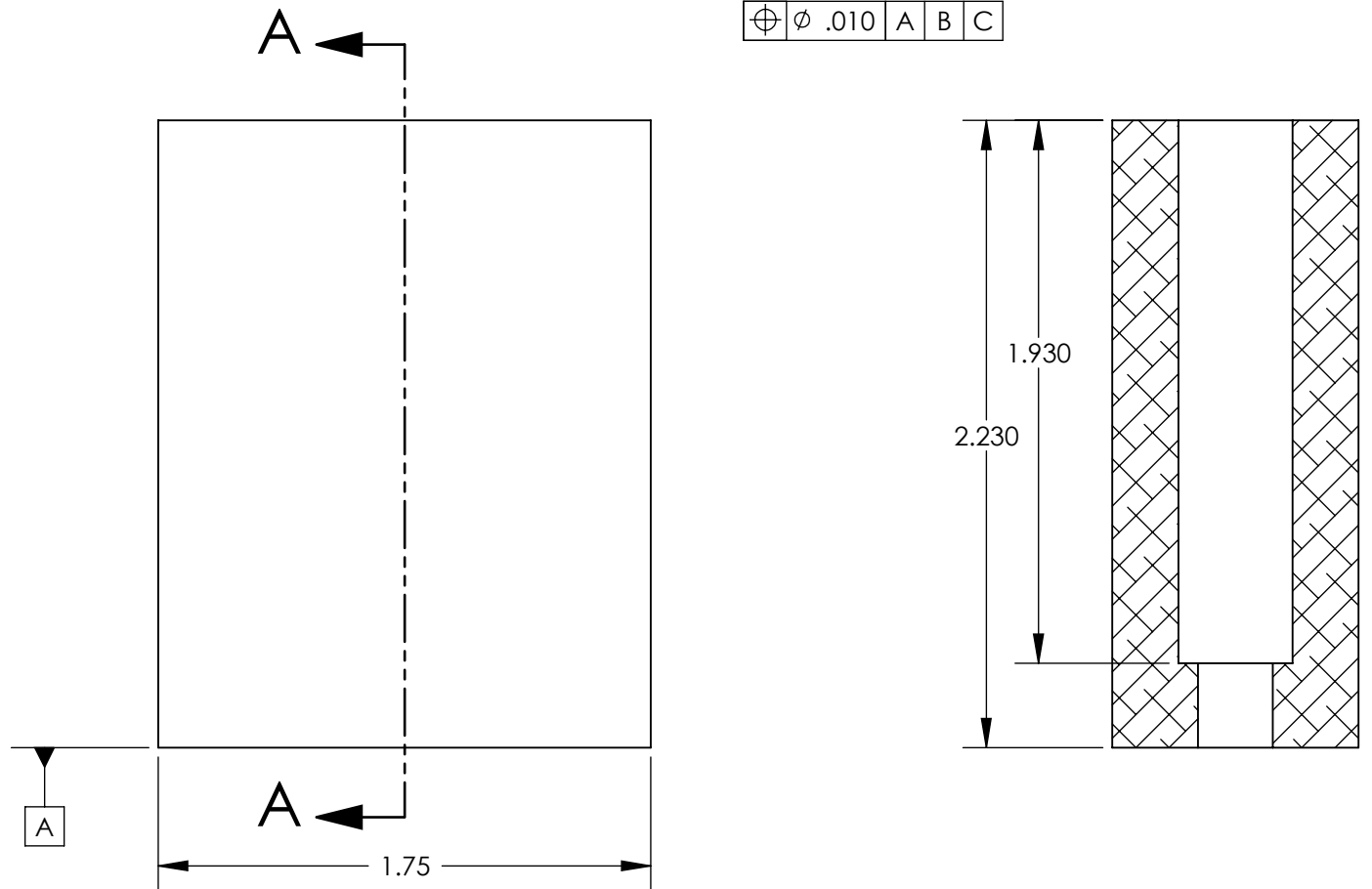
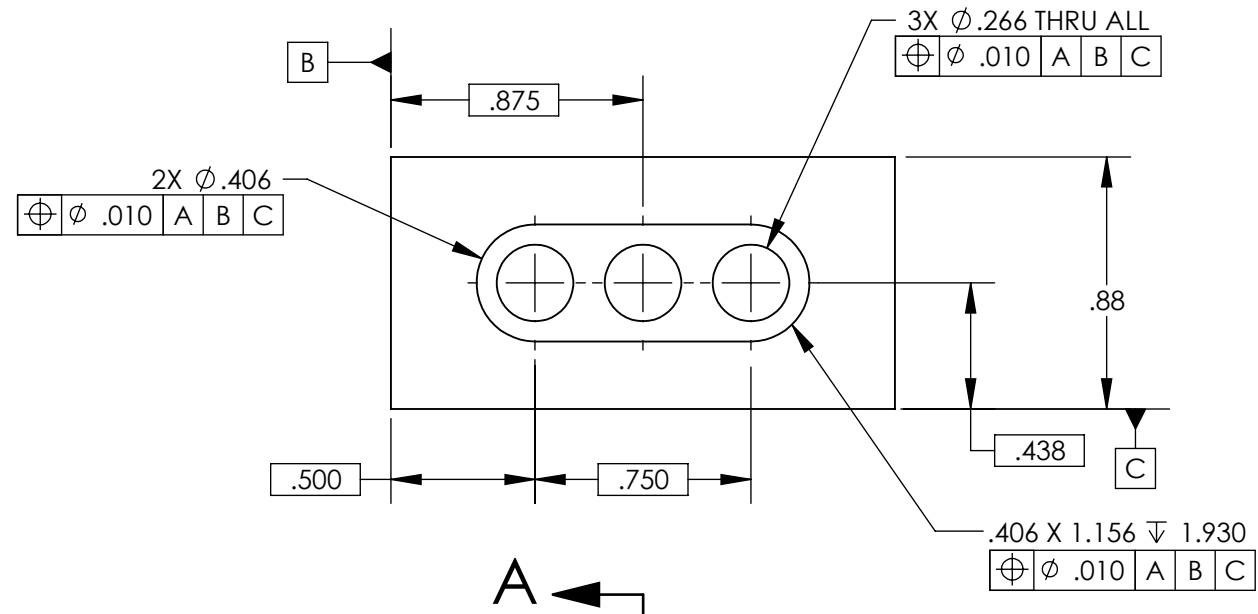
D1002540_ALIGO_AOS_Output Faraday Isolator Dummy Weight (rotate), PART PDM REV: X-002, DRAWING PDM REV: X-003

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO		CALIFORNIA INSTITUTE OF TECHNOLOGY		MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX \pm .02 .XXX \pm .010 ANGULAR \pm .5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SYSTEM		SUB-SYSTEM		Output Faraday Isolator Dummy Weight (rotate)	
										DESIGNER	DRFTR
				MATERIAL		FINISH		NEXT ASSY		APPROVAL	
				304, 316 OR 302 SSSL		63 μ inch		D0900623		B D1002540 v1 SCALE: 3:2 PROJECTION: SHEET 1 OF 1	

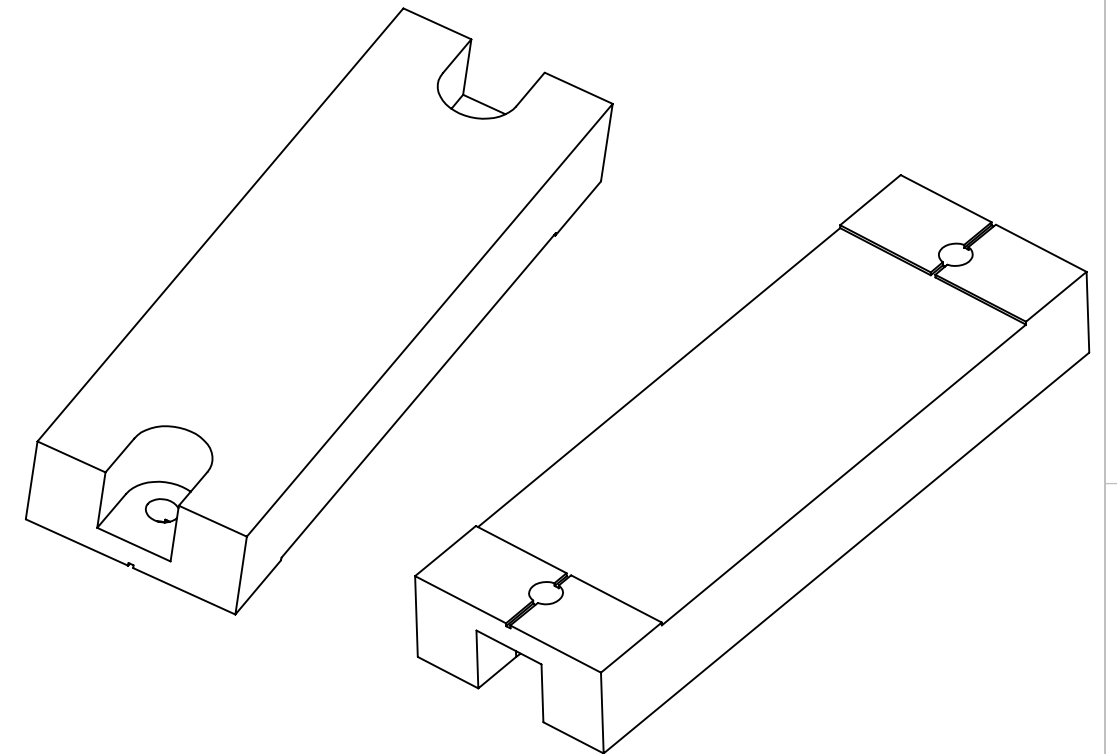
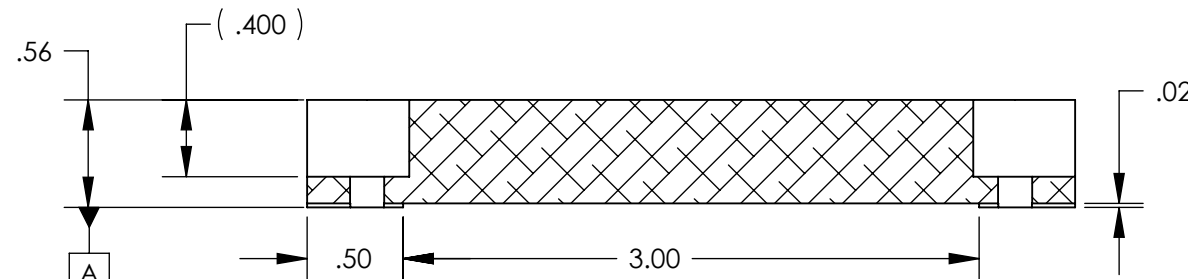
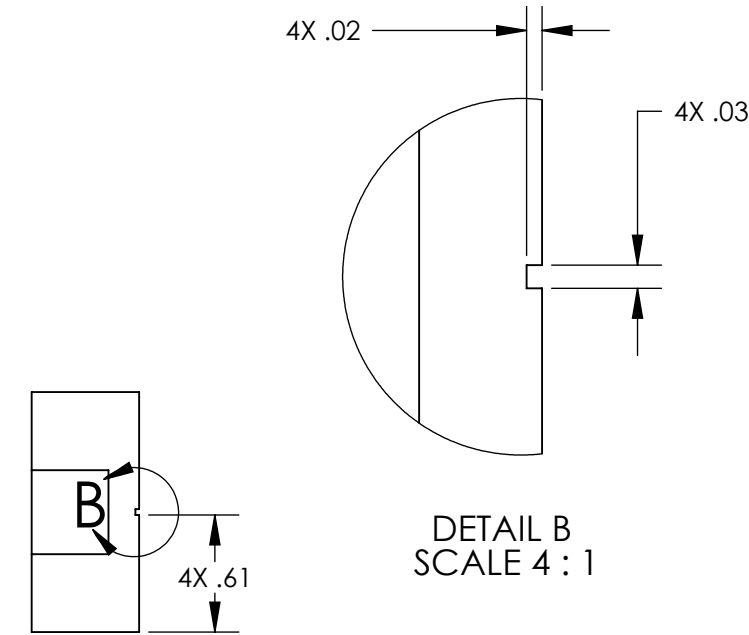
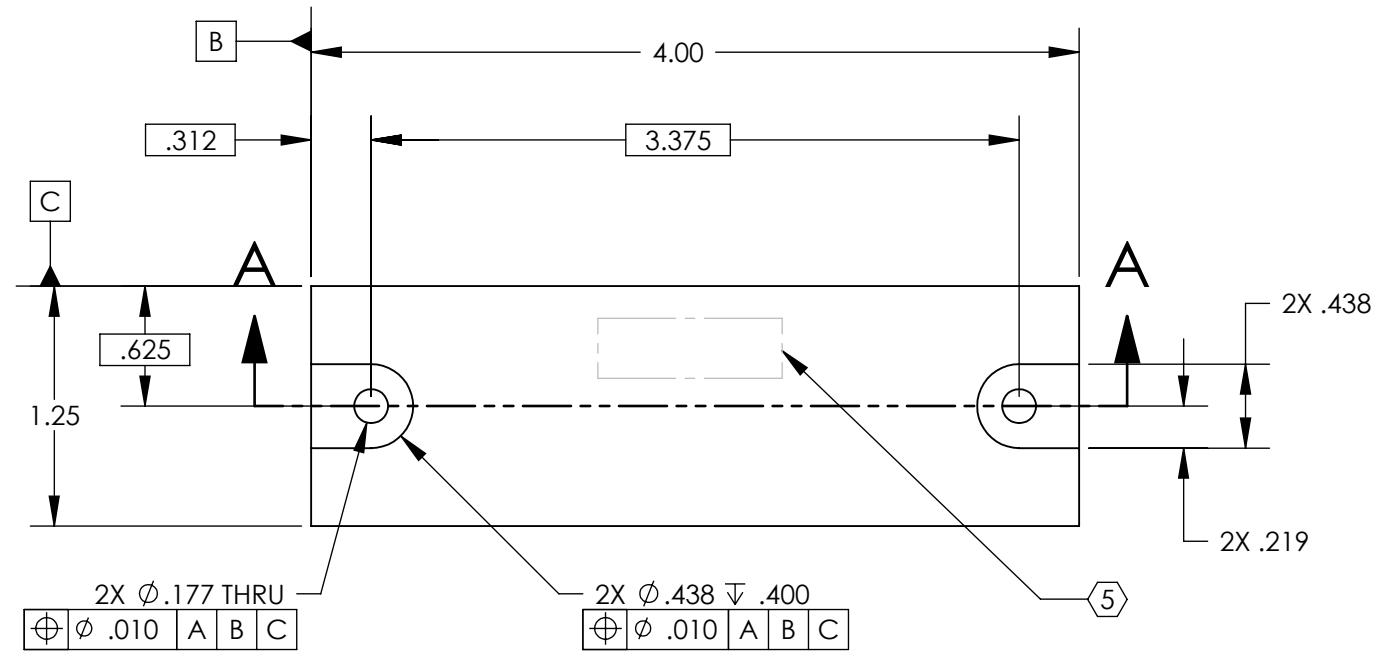
D1002542_AdlIGO_AOS_FID0900623_Table Balance Weight. 75#, PART PDM REV: X-009, DRAWING PDM REV: X-008

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	-
v2	28 FEB 2011	E1000563	-
v3	21 MAR 2011	E1000563	-



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN
 TOLERANCES:
 .XX $\pm .01$
 .XXX $\pm .005$
 ANGULAR $\pm .5^\circ$

1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES, R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL: 304, 316 OR 302 SSSL
 FINISH: 125 μ inch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO
 SUB-SYSTEM: AOS
 NEXT ASSY: D0900623

PART NAME: TABLE BALANCE WEIGHT, .75#

DESIGNER	MRUIZ	01 OCT 2010	SIZE	DWG. NO.	REV.
DRAFTER			B	D1002542	v3
CHECKER			SCALE: 1:1	PROJECTION:	SHEET 1 OF 1
APPROVAL					

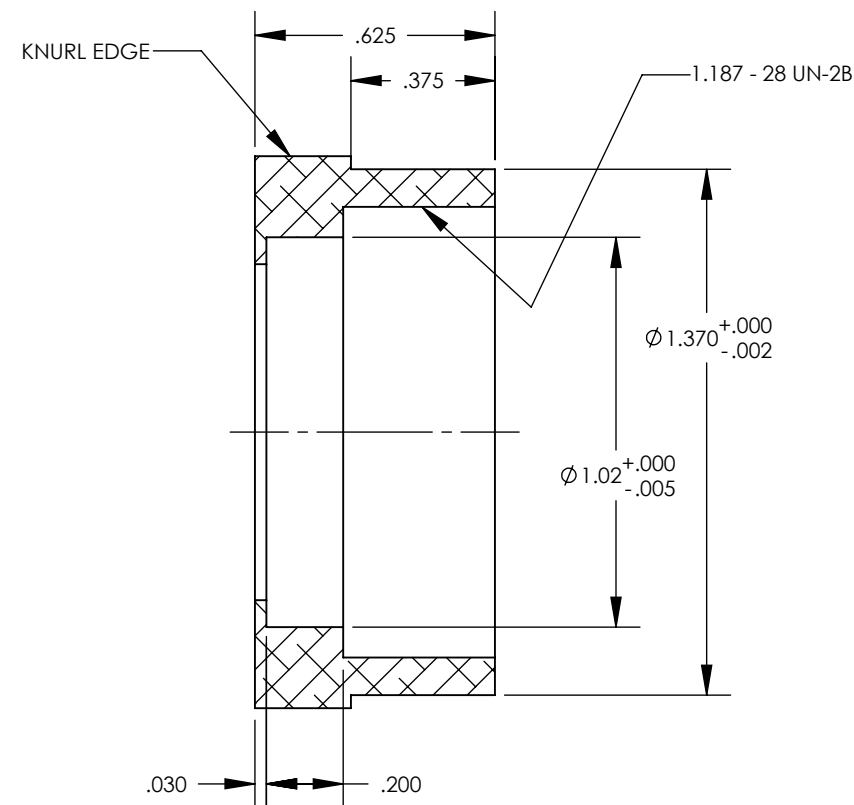
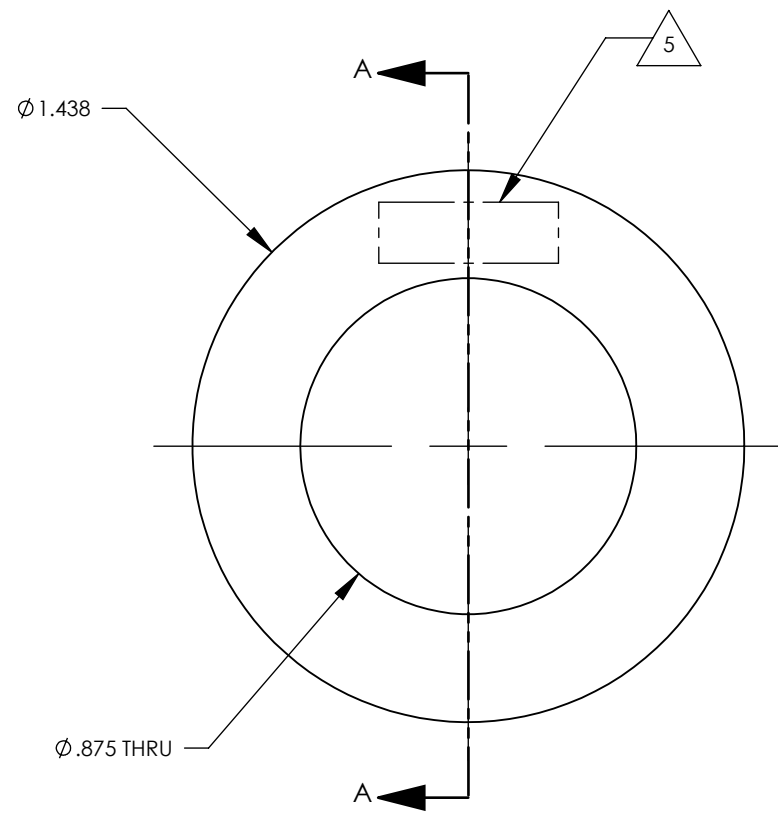
NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.

7. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	07 JAN 2011	E1000563	-
-	-	-	-
-	-	-	-



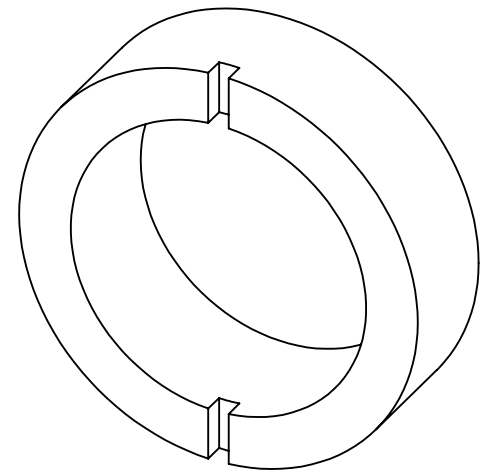
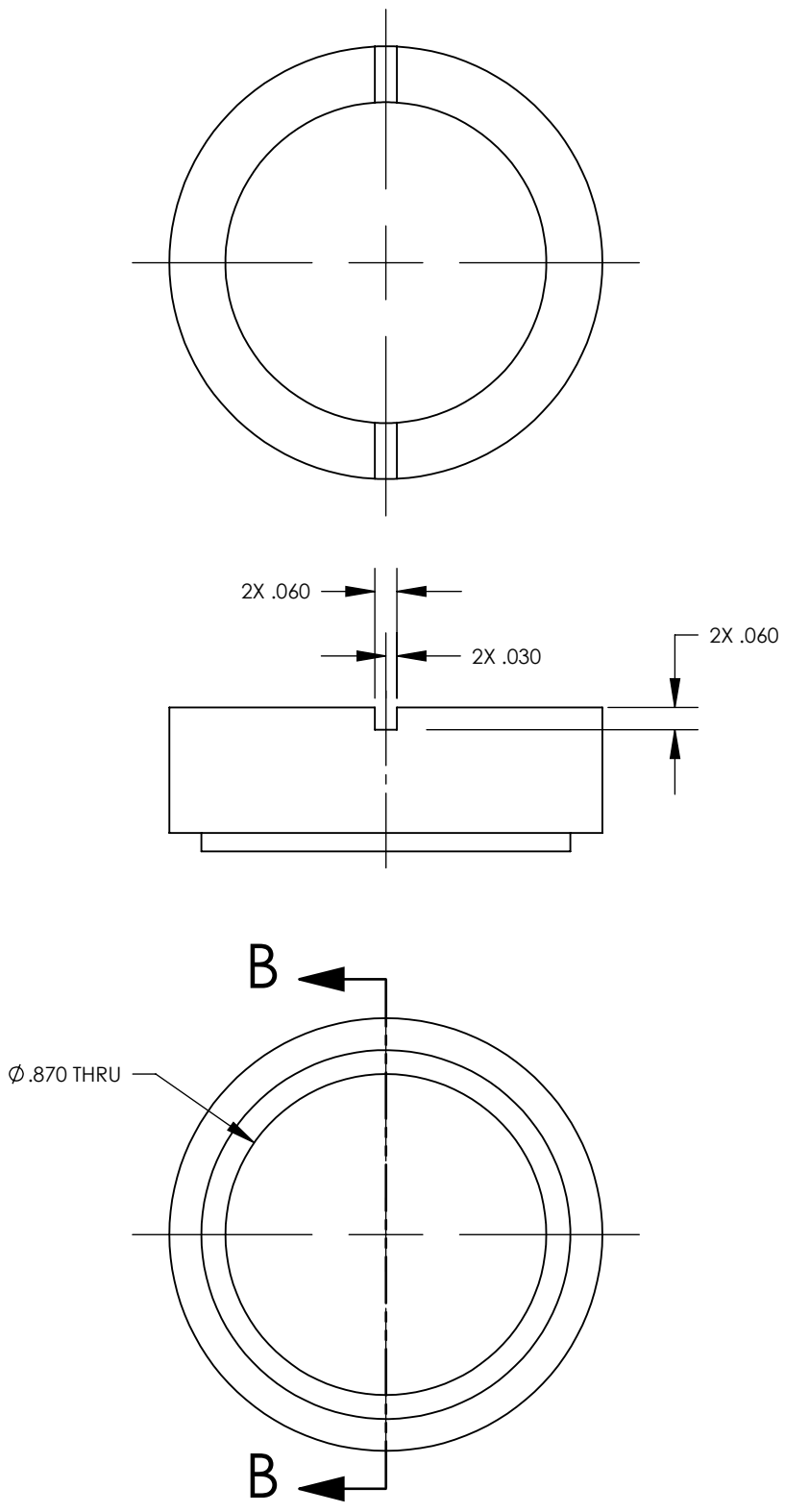
SECTION A-A

D1100019_d1100019_half Wave Quartz Holder, PART PDM REV: X-000, DRAWING PDM REV: X-004

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN		1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SYSTEM ADVANCED LIGO		SUB-SYSTEM AOS	
TOLERANCES: .XX ± .02 .XXX ± .010		MATERIAL 304 SSSL		FINISH 63 μinch		NEXT ASSY D1100029	
ANGULAR ± .5°						DESIGNER M.RUIZ	
						DATE 06 JAN 2011	
						DRAFTER M.RUIZ	
						DATE 06 JAN 2011	
						CHECKER	
						APPROVAL	
						SIZE DWG. NO. B D1100019	
						REV. V1	
						SCALE: 2:1 PROJECTION: SHEET 1 OF 1	

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD
 6. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.
 7. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
V1	07 JAN 2011	E1000563	-
-	-	-	-
-	-	-	-



SECTION B-B

D1100020_d1100020_Half Wave Quartz Nut, PART PDM REV: X-001, DRAWING PDM REV: X-005

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN		1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SYSTEM		SUB-SYSTEM	
TOLERANCES: .XX ± .01 .XXX ± .005		MATERIAL		ADVANCED LIGO		AOS	
ANGULAR ± .5°		6061-T6 Al		NEXT ASSY		D1100029	
		FINISH		DESIGNER		M.RUIZ	
		63 μinch		DRAFTER		M.RUIZ	
				CHECKER		06 JAN 2010	
				APPROVAL		06 JAN 2011	
				SCALE		2:1	
				PROJECTION		FIRST ANGLE	
				SIZE		DWG. NO.	
				B		D1100020	
				REV.		V1	
				SHEET		1 OF 1	

8

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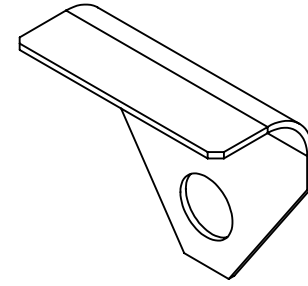
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NOTES CONTINUED:

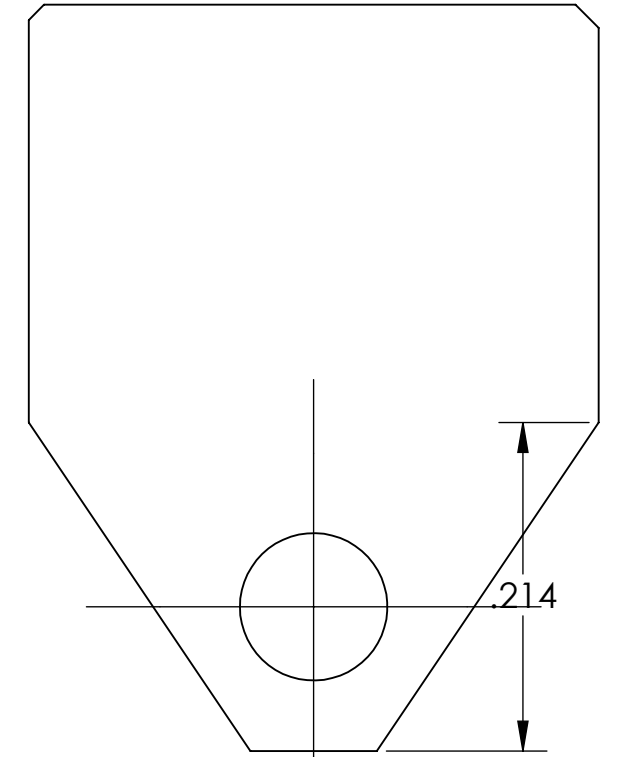
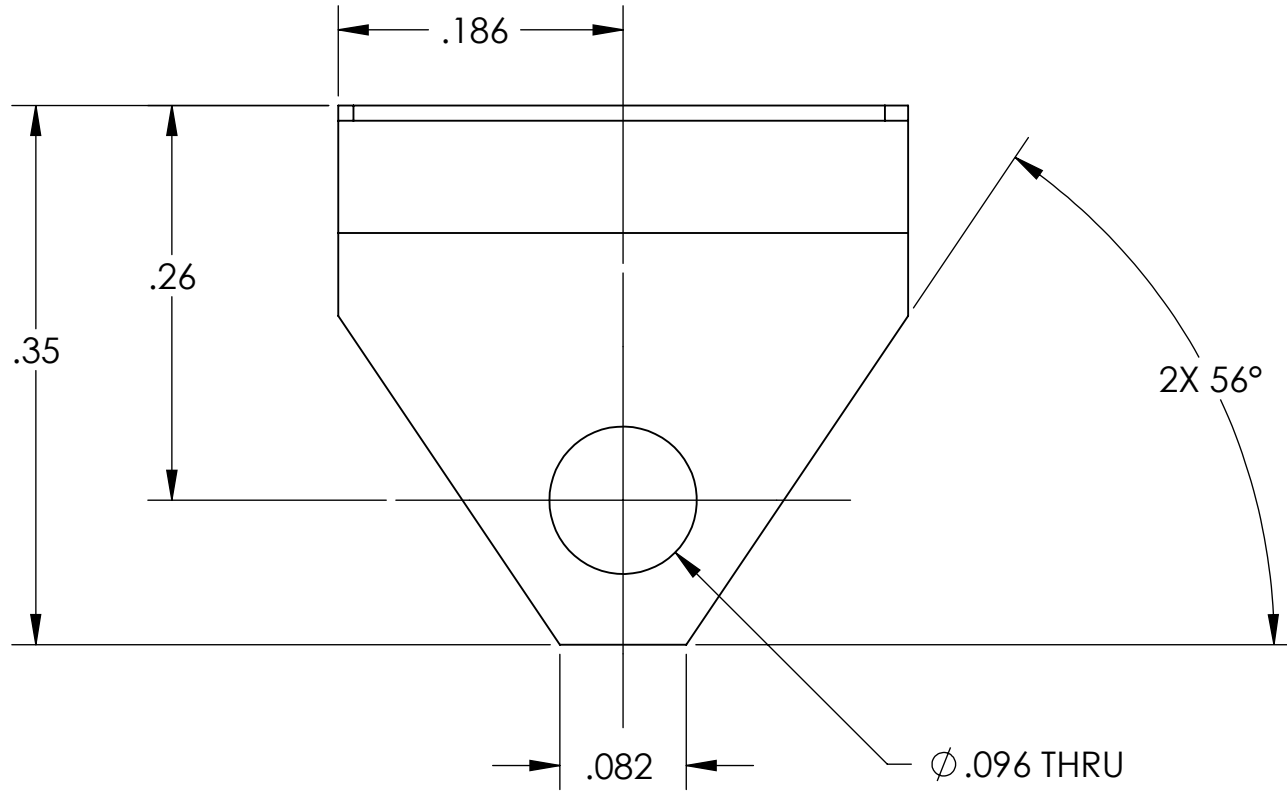
5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

- 6. APPROXIMATE WEIGHT = 0.0004 LB.
- 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
- 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

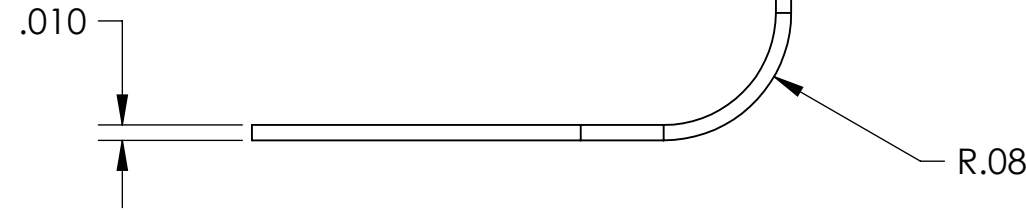
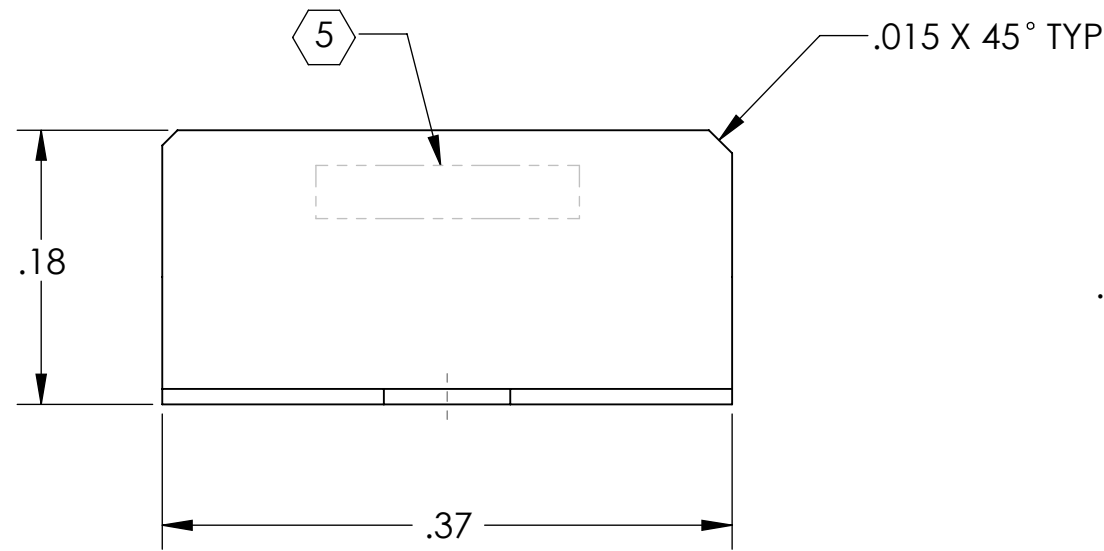
REV.	DATE	DCN #	DRAWING TREE #
v1	06 JAN 2011	E1000563	-
v2	23 MAR 2011	E1000563	-
-	-	-	-



GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE



FLAT PATTERN



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX ± .01
 .XXX ± .005
 ANGULAR ± 0.5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. REMOVE ALL SHARP EDGES, R.02 MIN.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL 304 SSSL FINISH 63 μinch

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
SYSTEM ADVANCED LIGO SUB-SYSTEM AOS		CLIP	
DESIGNER	N. KILPATRICK	06 JAN 2011	SIZE DWG. NO.
DRAFTER	N. KILPATRICK	06 JAN 2011	B D1100027
CHECKER			REV. v2
APPROVAL			SCALE: 8:1 PROJECTION:
		SHEET 1 OF 1	

D1100027_clIGO_AOS_D0900614_Faraday Isolator CLIP, PART PDM REV: X-002, DRAWING PDM REV: X-001

8

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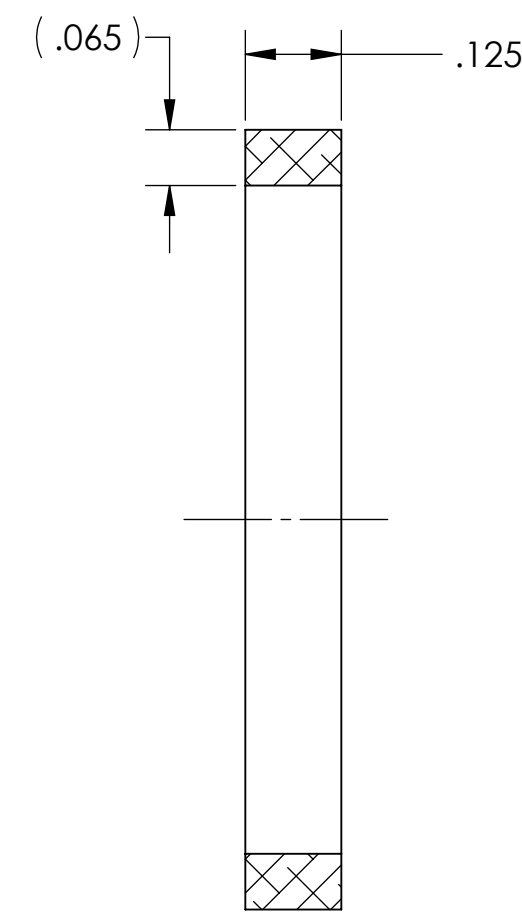
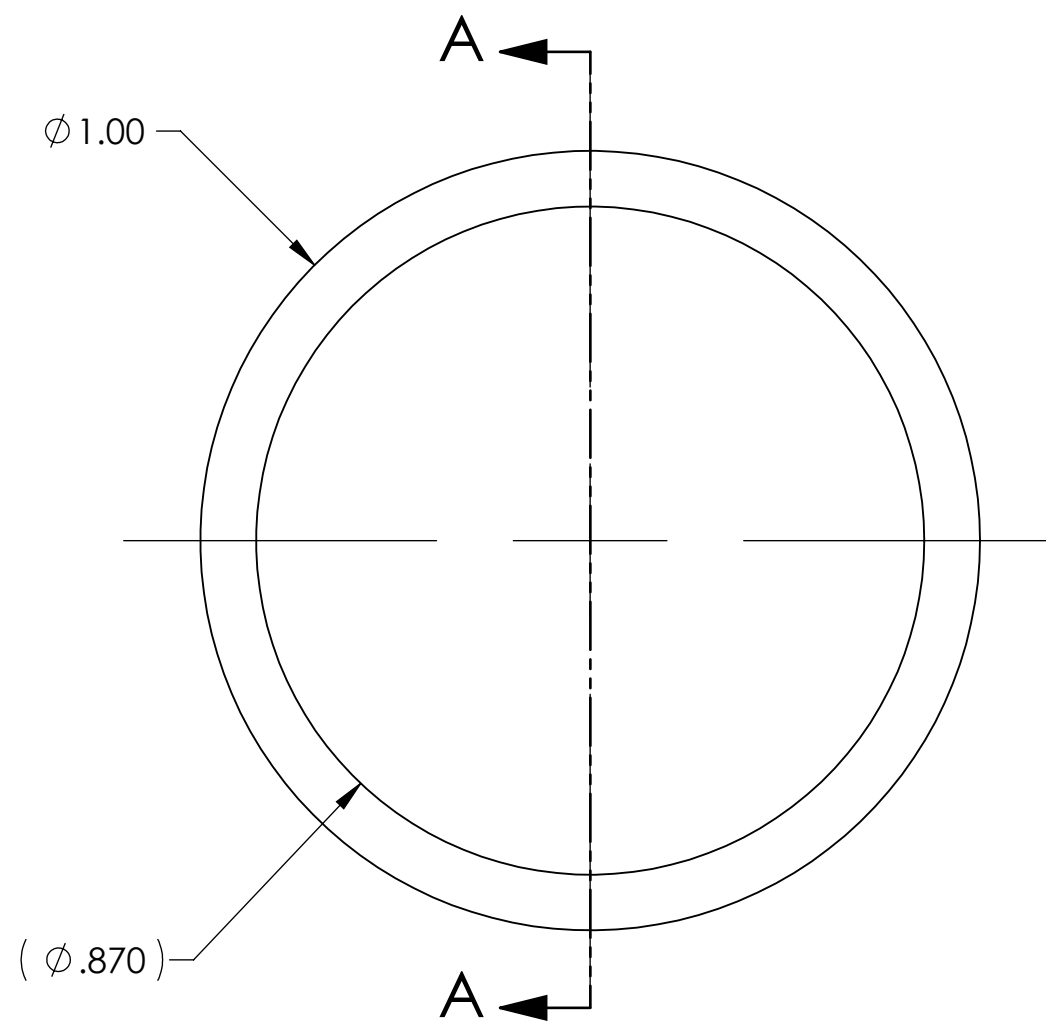
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NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

6. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NOT WELD REPAIRS OR PLUGS UNLESS APPROVED IN ADVANCE IN WRITING BY LIGO, REFER TO LIGO-E0900364.
7. NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. IN GENERAL WELD REPAIRS AND PRESS FIT INSERT REPAIRS ARE NEVER ACCEPTABLE; THE MATERIAL SHOULD BE MADE WITH VIRGIN MATERIAL. SPECIAL CIRCUMSTANCES CAN BE REVIEWED IF / WHEN BROUGHT TO THE ATTENTION OF LIGO CONTRACTING OFFICER'S REPRESENTATIVE (COTR) THROUGH A MATERIAL REVIEW BOARD (MRB) PROCESS, REFER TO LIGO-E0900364.
8. ELECTRO-POLISH IN ACCORDANCE WITH LIGO-E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	06 JAN 2011	E1000563	-
-	-	-	-
-	-	-	-



SECTION A-A

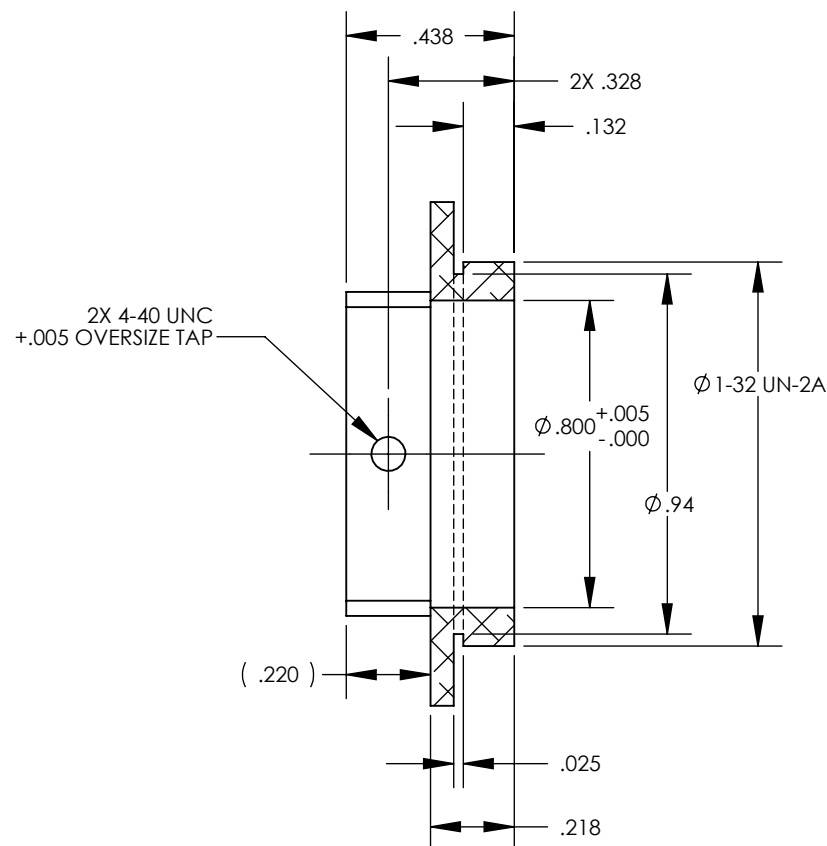
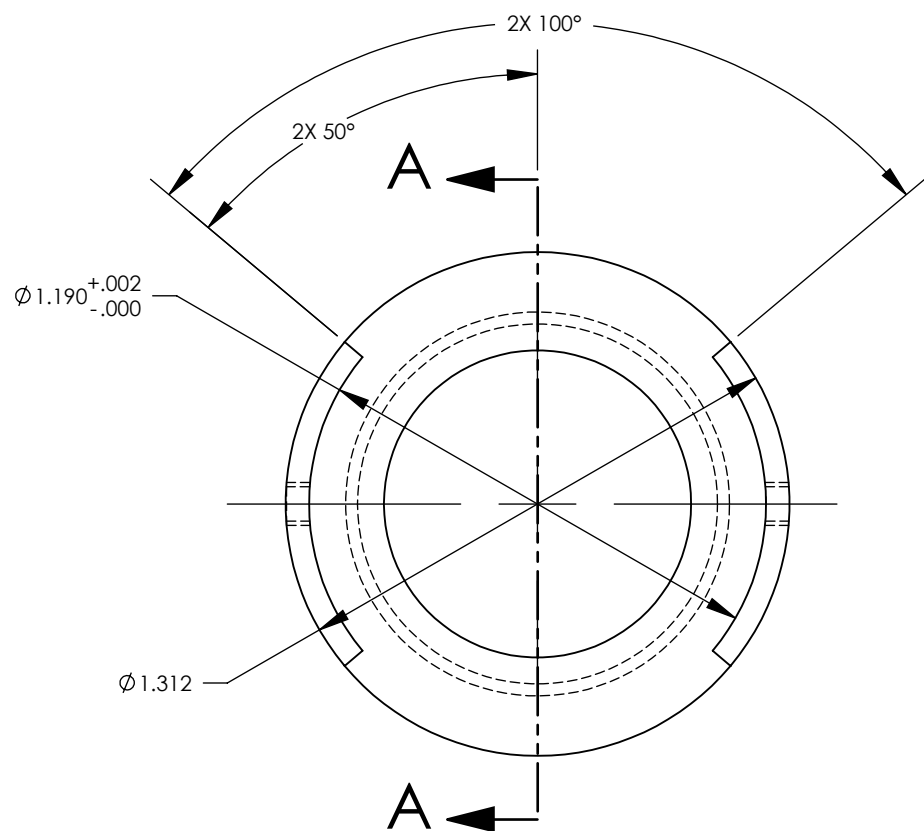
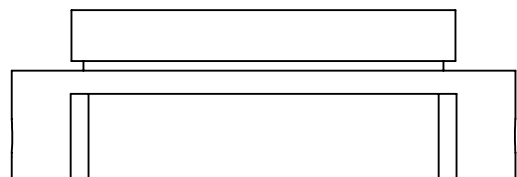
D1100030 ALIGO AOS Half Wave Quartz Spacer, PART PDM REV: X-001, DRAWING PDM REV: X-005

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± .5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		HALF WAVE QUARTZ SPACER	
MATERIAL		FINISH		NEXT ASSY		DESIGNER	SIZE DWG. NO.
6061-T6 Al, TUBING		63 μinch		D1100029		M.RUIZ	B
						CHECKER	REV.
						APPROVAL	v1
				SCALE: 4:1		PROJECTION: SHEET 1 OF 1	

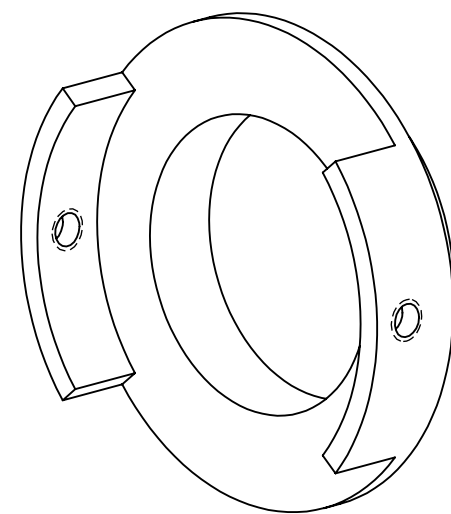
NOTES CONTINUED:

5. SCRIBE, ENGRAVE, LASER MARK OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT.
 EXAMPLE (PART): 001-v1
 EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

- D 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED. REFER TO LIGO-E0900364
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
8. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS, PLUGS OR RECYCLED MATERIAL). NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. REFER TO LIGO-E0900364.
9. SURFACE FINISH TO BE AS-PROCESSED FROM MILL/SUPPLIER, FREE FROM SCRATCHES OR GOUGES.



SECTION A-A



D1100556_d1lgo_aos_iris Diaphragm Mount, PART PDM REV: X-001, DRAWING PDM REV: X-000

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN	1. INTERPRET DRAWING PER ASME Y14.5-1994.
TOLERANCES:	2. REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS.
.XX ±	3. DO NOT SCALE FROM DRAWING.
.XXX ±	4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.
ANGULAR ± °	
MATERIAL	304, 316 OR 302 SSSL
FINISH	N/A μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO SUB-SYSTEM: AOS

NEXT ASSY: D1001918 & D1001963

PART NAME		IRIS DIAPHRAGM MOUNT	
DESIGNER	M. RUIZ	30 MAR 2011	SIZE DWG. NO.
DRAFTER	M. RUI	30 MAR 2011	B
CHECKER			D1100556
APPROVAL			REV. v1
SCALE: 2:1		PROJECTION:	SHEET 1 OF 1