CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DRWG NO. REV GID
E1000672-v2

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: (REFERENCE CONTENTS)	CIT, CC	6-Nov-10	v2	E1000563	MR			
CHECKED:								
APPROVED:								
DCC RELEASE								

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

LIGO

CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DRWG NO. REV GID
E1000672-v2

SHEET 1 OF 2

ASSEMBLY NO:
D0900136

OVERALL BILL OF MATERIALS

TITLE: OUTPUT FARADAY ISOLATOR, METAL MECHANICAL PARTS & QUANTITIES

38	1		1	D1001962	V1	Output Alignment Fixture Support	6061-T6 Al
39	1		1	D1002112	V1	Magnetic Plate Mount Back (Lowered) Bracket	6061-T6 Al
40	2		2	D1002168	V1	Music Wire Split Clamp 3	304, 316 or 302 SSTL
41	2		2	D1002169	V1	Music Wire Split Clamp 4	304, 316 or 302 SSTL
42	1		1	D1002257	V1	Crossbar Plate In	6061-T6 Al
43	2		2	D1002362	V1	Faraday Isolator Beam Dump Mount	6061-T6 Al
44	2		2	D1002533	V1	Output Faraday Isolator Dummy Weight	304, 316 or 302 SSTL
45	2		2	D1002540	V1	Output Faraday Isolator Dummy Weight (Rotate)	304, 316 or 302 SSTL
46	4		4	D1002542	V1	Table Balance Weight .75#	304, 316 or 302 SSTL
47	12	2	14	D1100027	V1	Clip	304 SSTL

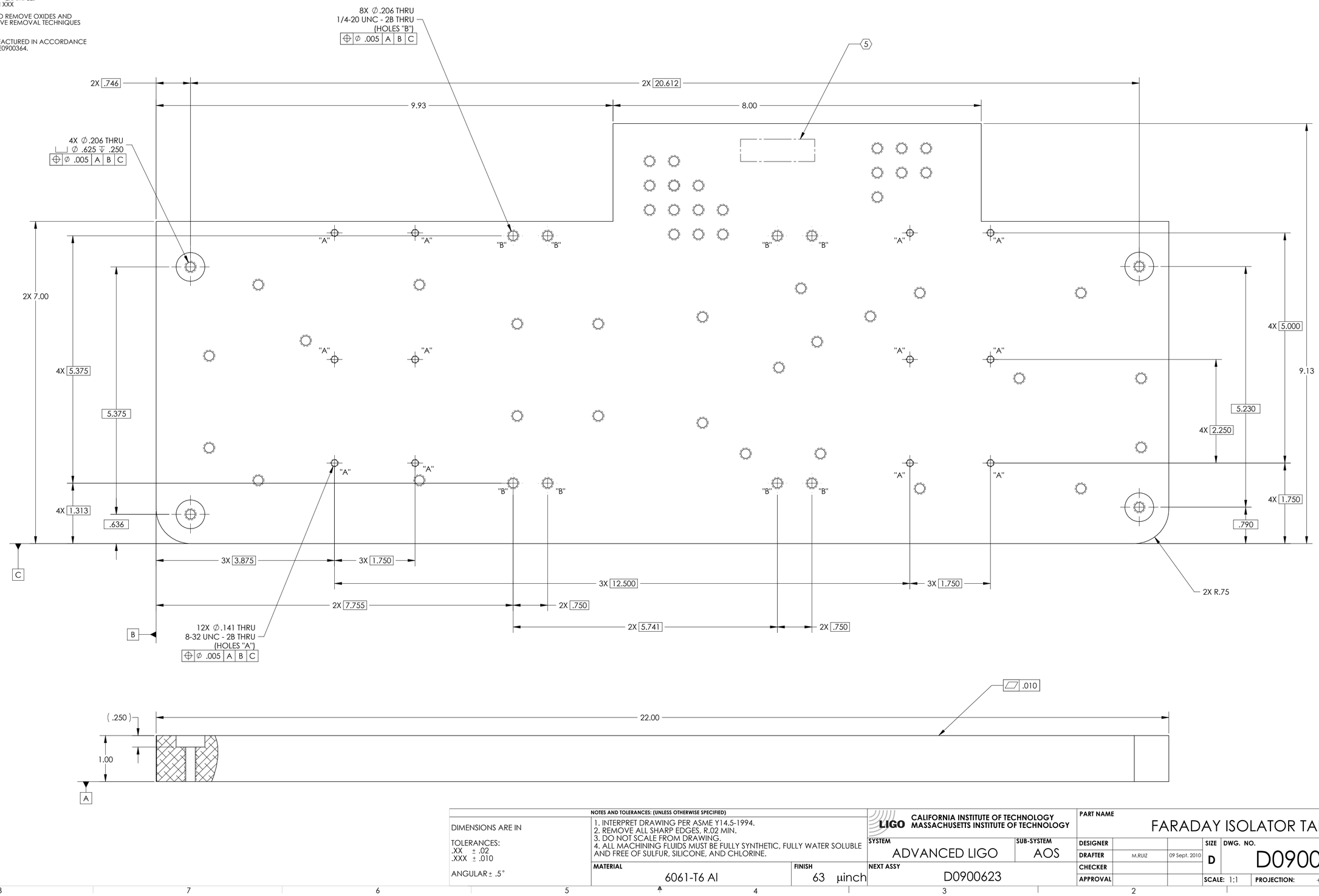
NOTES CONTINUED:

Ⓢ 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: DXXXXXXX-VY, TYPE-XX, S/N XXX

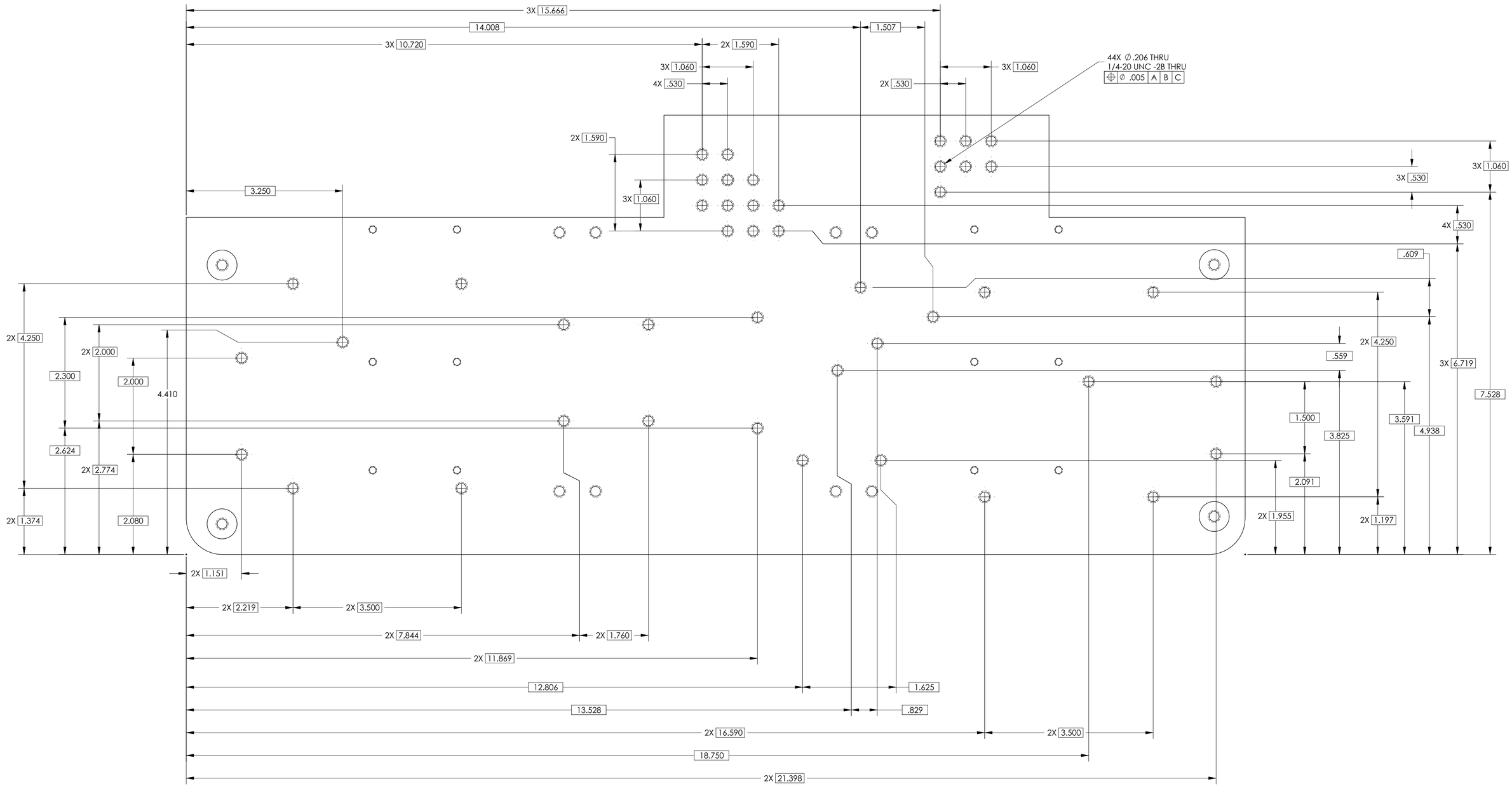
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

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

REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	



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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME: FARADAY ISOLATOR TABLE	
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO / SUB-SYSTEM: AOS	NEXT ASSY: D0900623	DESIGNER / DRAFTER: M.RUIZ 09 Sept. 2010 / CHECKER / APPROVAL
			SIZE: D	DWG. NO.: D0900015	REV.: v1
			SCALE: 1:1	PROJECTION:	SHEET 1 OF 2



LIGO	CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE: D	DWG. NO.: D0900015	REV.: v1
SCALE: 1:1	PROJECTION:	SHEET 2 OF 2

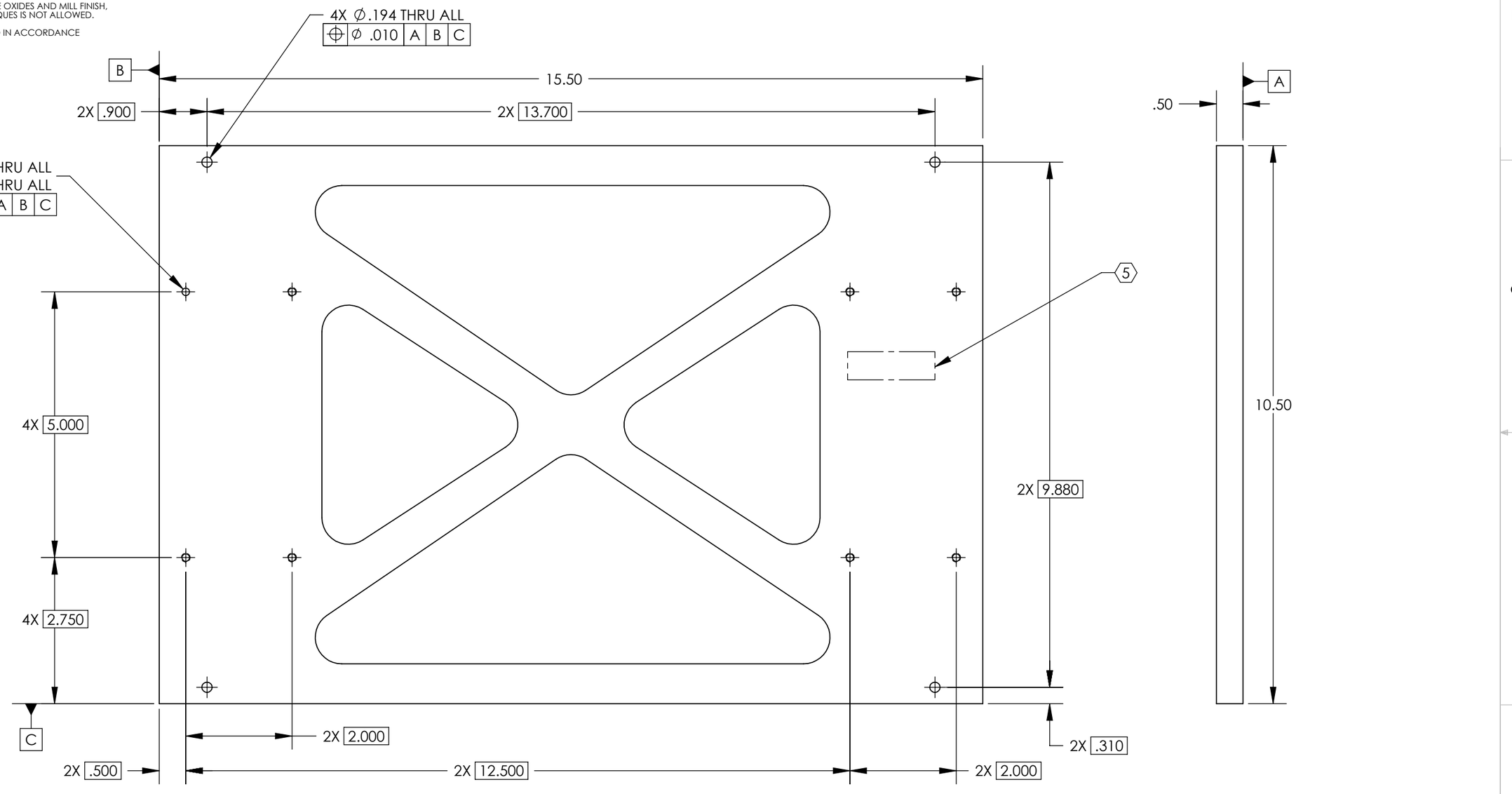
REV.	DATE	DCN #	DRAWING TREE #
V1	28 JUL 2009	E0900217	
v2	07 OCT 2010	E1000563	

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: DXXXXXXX-VY, TYPE-XX, S/N XXX

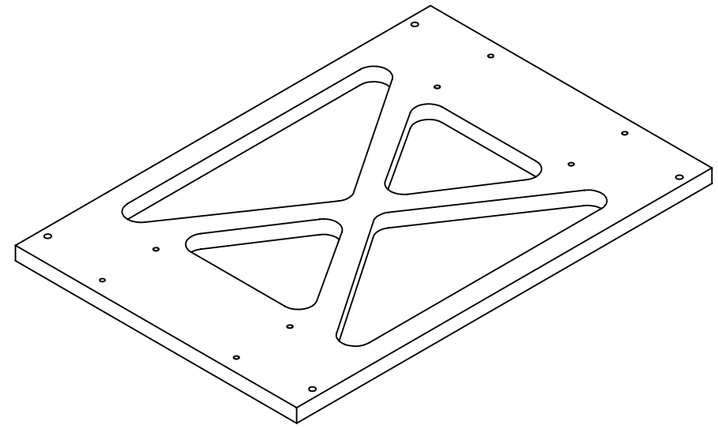
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

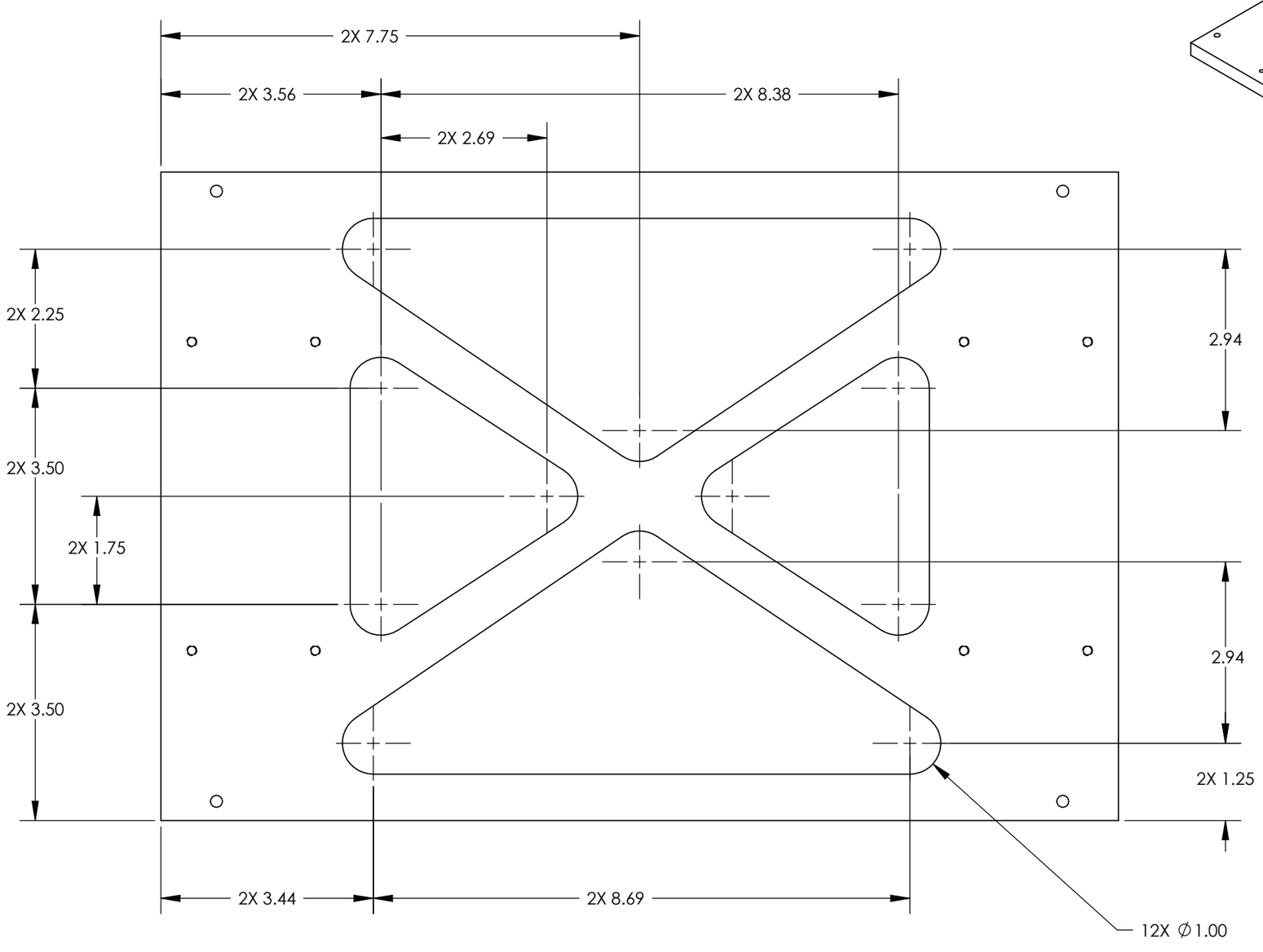
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)							
DIMENSIONS ARE IN 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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME: MAGNET MOUNTING PLATE			
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER		
	NEXT ASSY: D0900048				DRAFTER: N.Nguyen 22 Jul 2009	SIZE: B	DWG. NO.: D0900026 REV.: v2
					CHECKER: K. Mailand 28 Jul 2009		
					APPROVAL: C. Torrie 28 Jul 2009	SCALE: 1:2	PROJECTION: SHEET 1 OF 2

D0900026_AdLIGO_AOS_FI D0900048_Magnet Mounting Plate, PART PDM REV: X-024, DRAWING PDM REV: X-017





LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIZE	DWG. NO.	REV.
B	D0900026	v2

SCALE: 1:2 | PROJECTION: | SHEET 2 OF 2

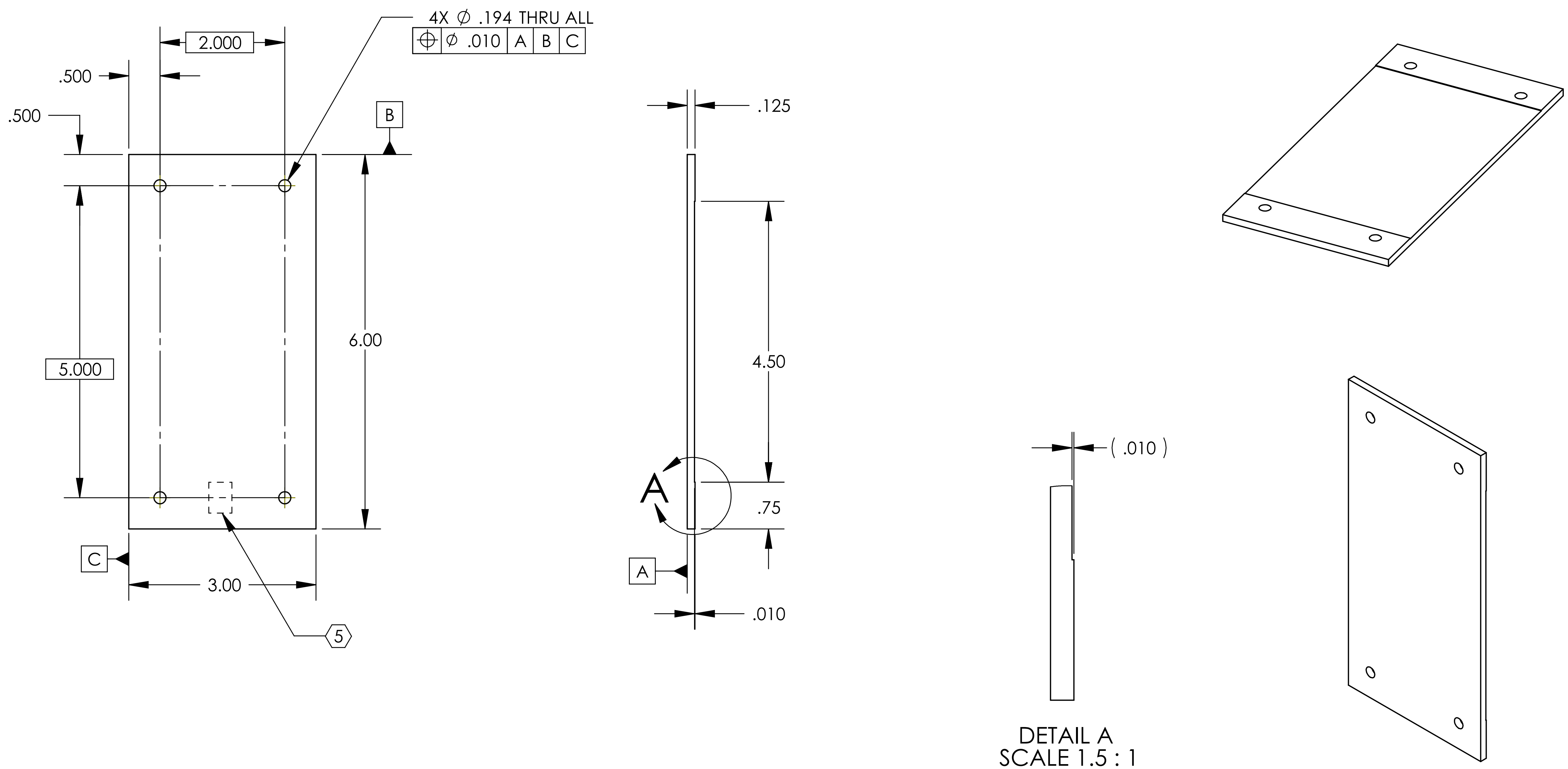
NOTES CONTINUED:

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.
EXAMPLE: DXXXXXXX-VX, 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	19 JUL 2009		
v2	07 OCT 2010	E1000563	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
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. **MATERIAL** 99.99% COPPER — **FINISH** 63 µinch

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM	ADVANCED LIGO
SUB-SYSTEM	AOS
NEXT ASSY	D0900048
PART NAME	COPPER PLATE
DESIGNER	
DRAFTER	N.Nguyen, 18 May 2009
CHECKER	
APPROVAL	
SIZE	B
DWG. NO.	D0900027
REV.	v2
SCALE:	1:1
PROJECTION:	
	SHEET 1 OF 1

D0900027_AdLIGO_AOS_D0900623_Copper Plate, PART PDM REV: X-009, DRAWING PDM REV: X-014

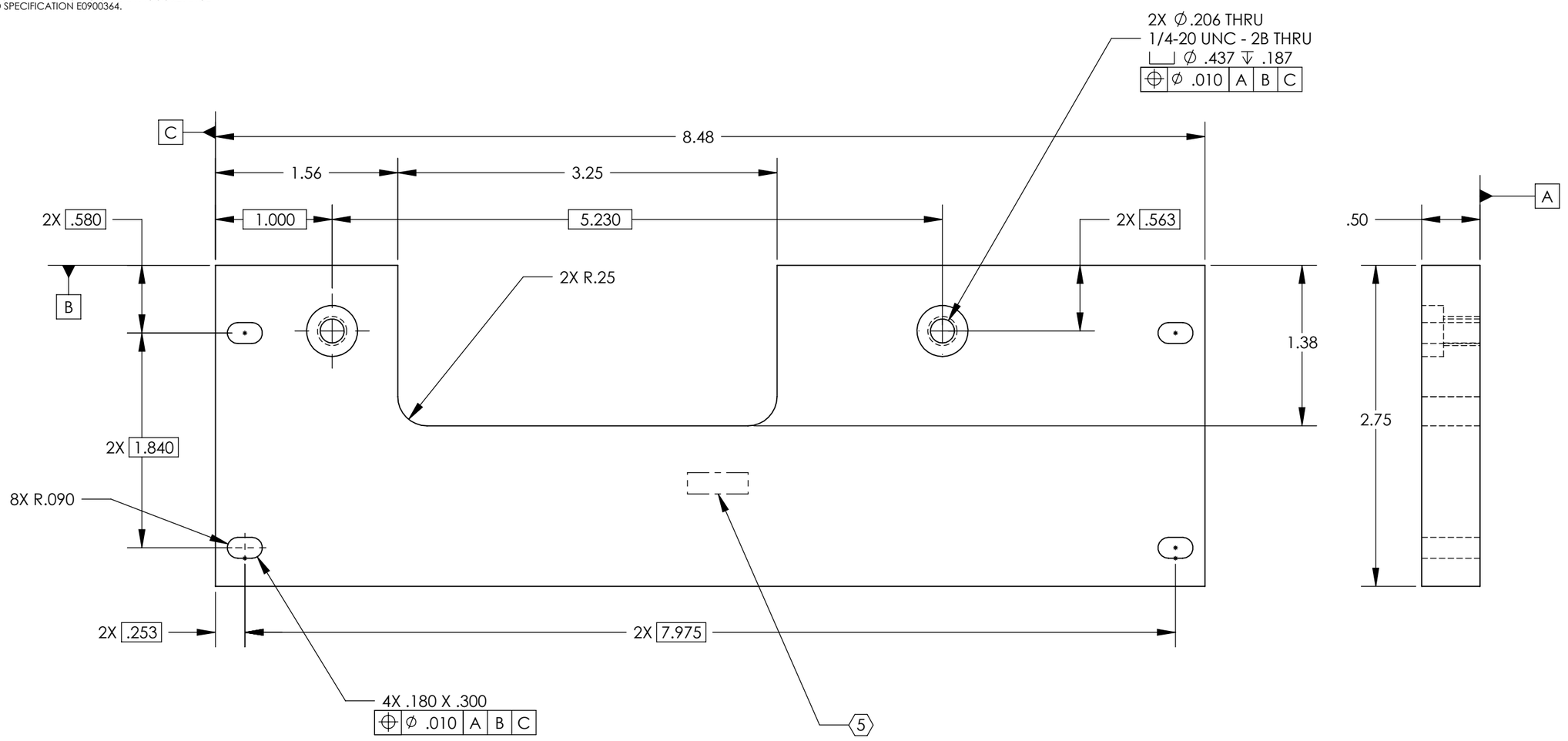
REV.	DATE	DCN #	DRAWING TREE #
v1	01 JUL 2009	DCN #	
v2	07 OCT 2010	E1000563	

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: DXXXXXXX-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 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.			LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: CROSSBAR PLATE	
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	NEXT ASSY: D0900170	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	SIZE: B	DWG. NO.: D0900168 REV.: v2
				DESIGNER		SCALE: 1:1	PROJECTION: SHEET 1 OF 1
				DRAFTER: N.Nguyen 26 May 2009			
				CHECKER: M. SMITH 01 JUL 2009			
				APPROVAL: C. TORRIE 01 JUL 2009			

D0900168_AdLIGO_AOS_D0900170_Crossbar Plate, PART PDM REV: X-011, DRAWING PDM REV: X-015

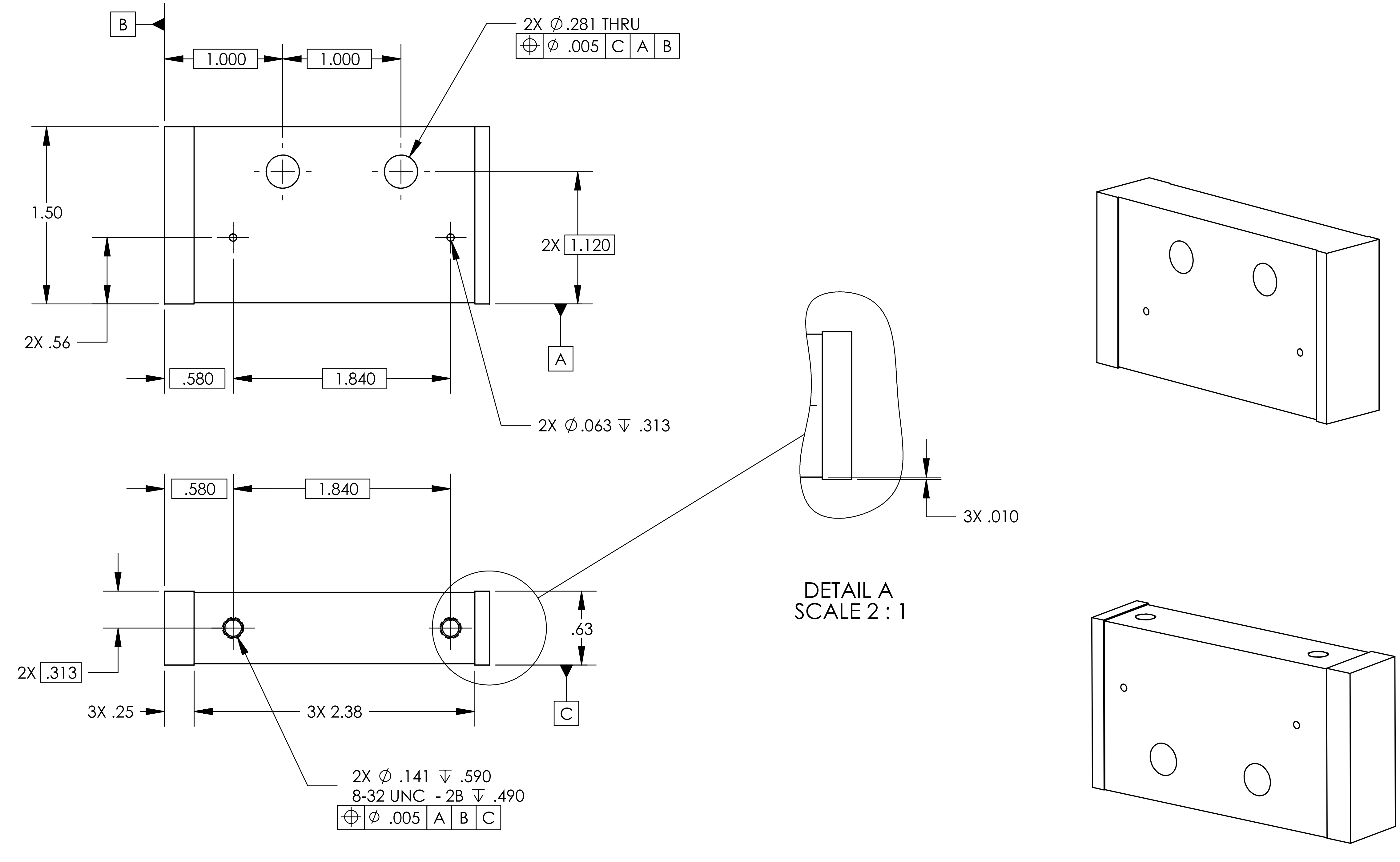
REV.	DATE	DCN #	DRAWING TREE #
v1	01 JUL 2009	DCN #	
v2	07 OCT 2010	E1000563	

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: DXXXXXXX-V1, TYPE-XX, S/N 0XX

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 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.		
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM	SUB-SYSTEM
ADVANCED LIGO	AOS
NEXT ASSY: D0900170 & D1002256	

PART NAME: CROSSBAR SIDE

DESIGNER		
DRAFTER	N.Nguyen	26 mAY 2009
CHECKER	M. SMITH	01 JUL 2009
APPROVAL	C. TORRIE	01 JUL 2009

SIZE	DWG. NO.	REV.
B	D0900169	v2
SCALE: 1:1	PROJECTION:	SHEET 1 OF 1

D0900169_AdLIGO_AOS_D0900170_Crossbar Side, PART PDM REV: X-014, DRAWING PDM REV: X-012

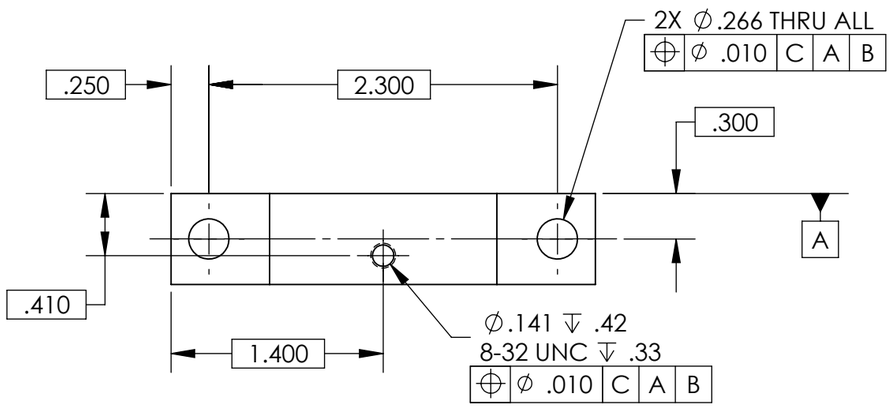
NOTES CONTINUED:

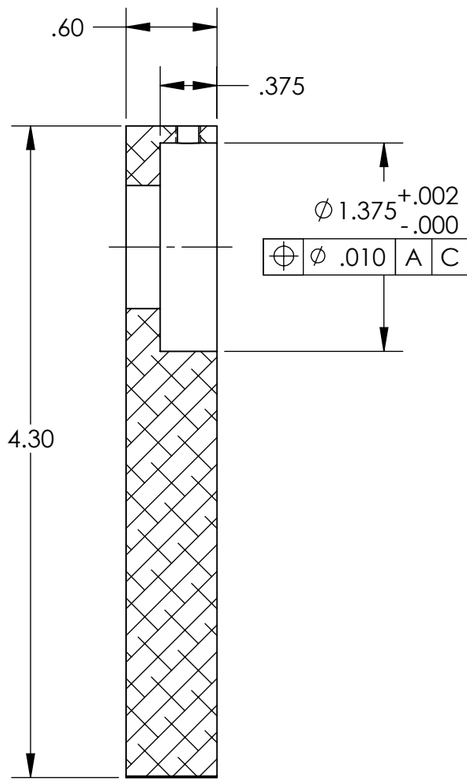
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

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

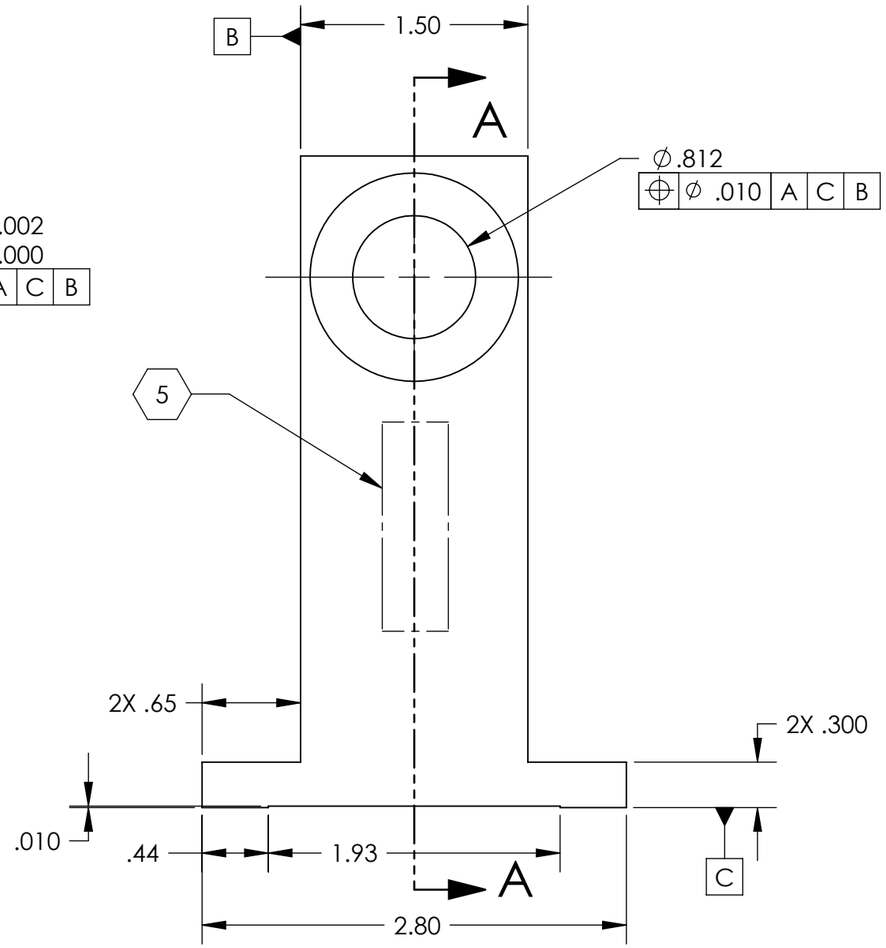
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

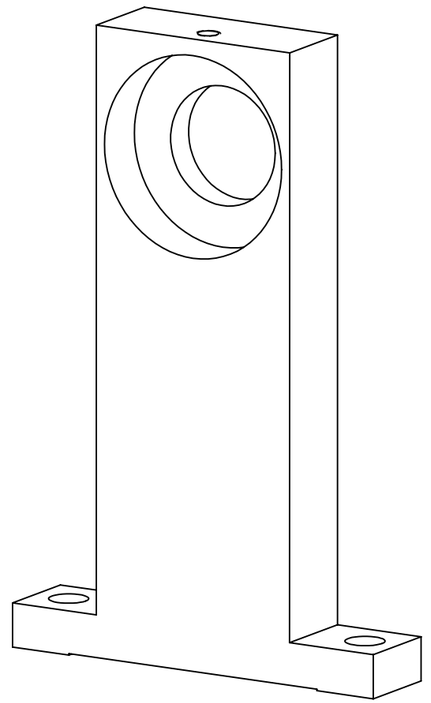
REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	
v2	07 JAN 2011	E1000563	





SECTION A-A





NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)							
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .02 .XXX ± .010 ANGULAR ± 0.6°	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: D0900353

PART NAME	HALF WAVE PLATE HOLDER					
DESIGNER			SIZE	DWG. NO.		REV.
DRAFTER	N.Nguyen	09 FEB 2010	B	D0900352		v2
CHECKER						
APPROVAL			SCALE: 1:1	PROJECTION:	SHEET 1 OF 1	

D0900352_AdLIGO-AOS_D0900353_Half Wave Plate Holder, PART PDM REV: X-010, DRAWING PDM REV: X-007

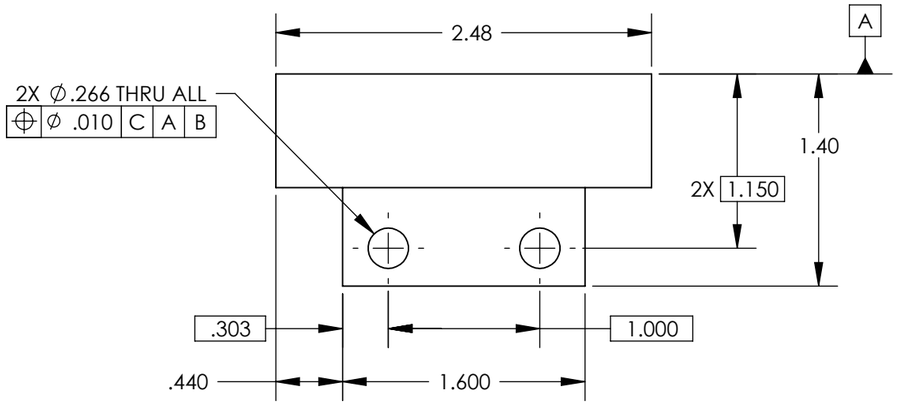
NOTES CONTINUED:

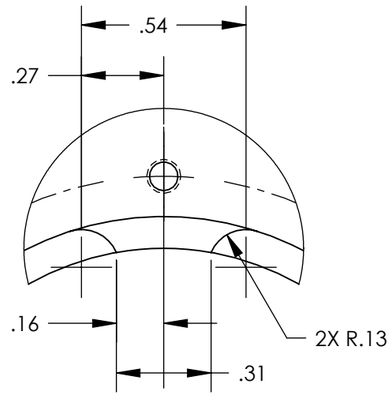
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

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

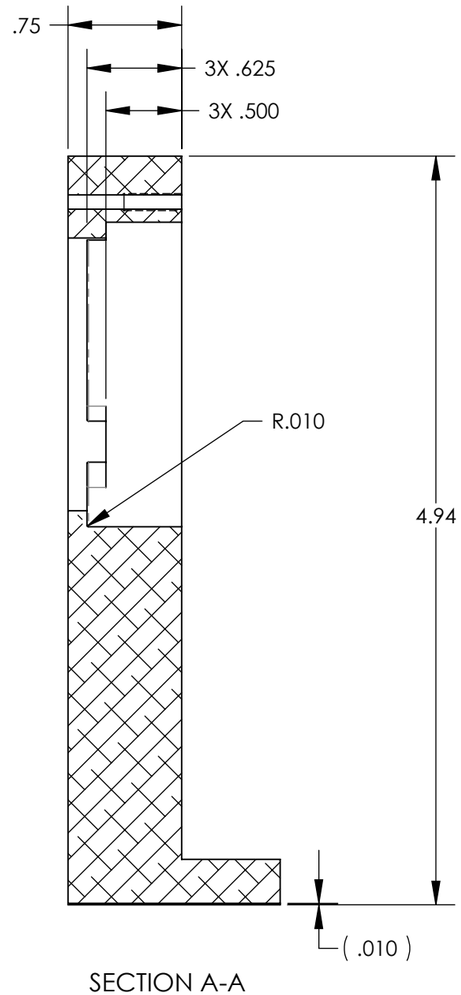
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	

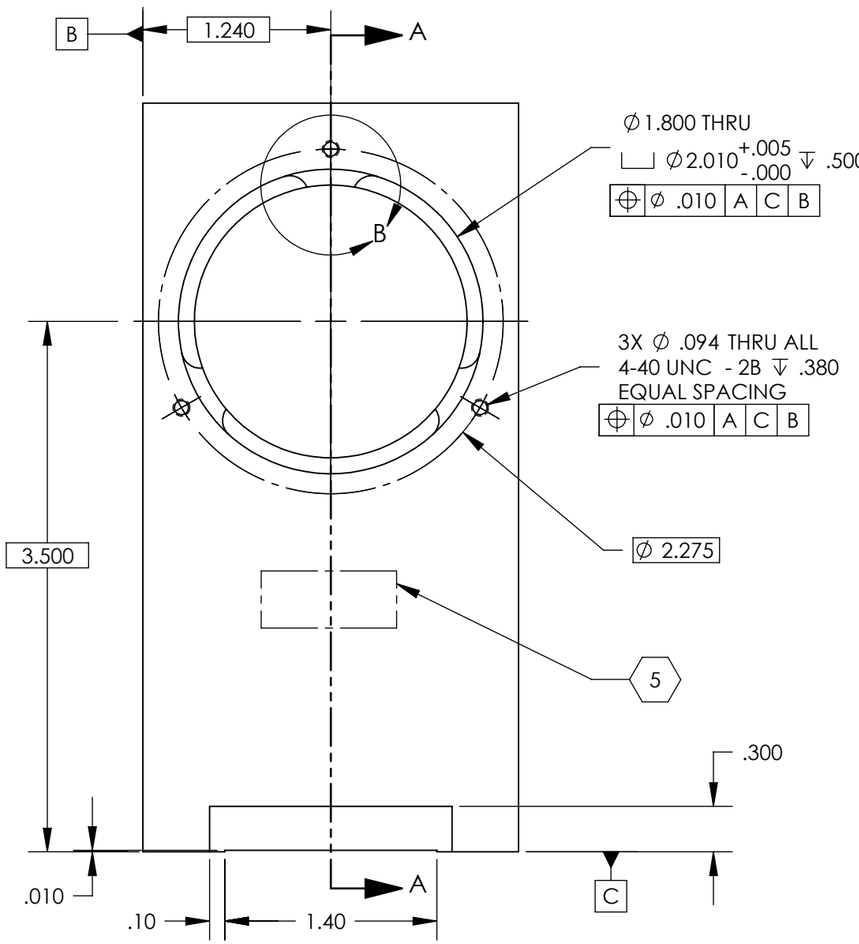




3X DETAIL B
SCALE 2 : 1
(EQUALLY SPACED)



SECTION A-A



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES

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

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM ADVANCED LIGO

SUB-SYSTEM AOS

NEXT ASSY D0900440

PART NAME TFP POLARIZER PLATE

DESIGNER			
DRAFTER	N.Nguyen	10 FEB 2010	
CHECKER			
APPROVAL			

SIZE B **DWG. NO.** D0900439 **REV.** v1

SCALE: 1:1 **PROJECTION:** SHEET 1 OF 1

D0900439_AdLIGO_AOS_D0900440_TFP Polarizer Plate, PART PDM REV: X-012, DRAWING PDM REV: X-018

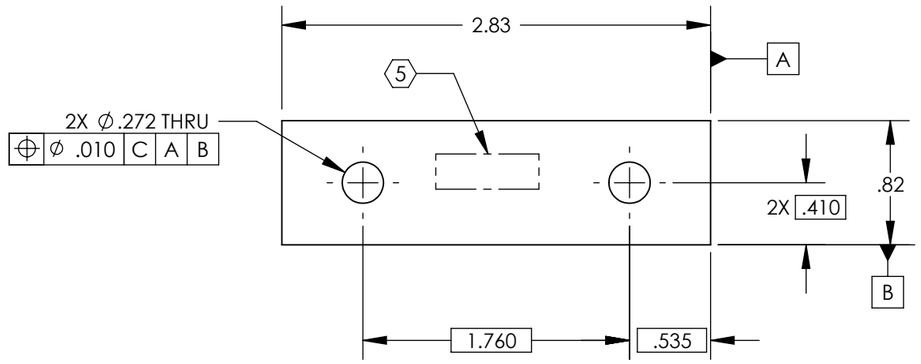
NOTES CONTINUED:

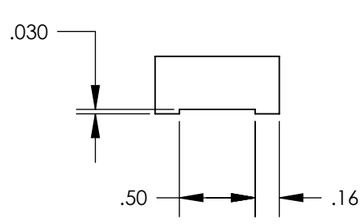
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

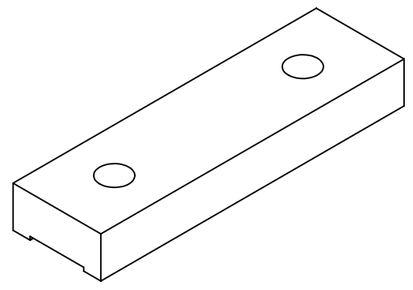
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

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

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)					
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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME: UP BLADE CLAMP TOP	
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM	SUB-SYSTEM	
			NEXT ASSY: D0900136	DESIGNER	
				DRAFTER: N.Nguyen, 14 Jul 2009	SIZE: B
				CHECKER: K. Mailand, 16 Jul 2009	DWG. NO.: D0900566
				APPROVAL: C. Torrie, 17 Jul 2009	REV.: v2
				SCALE: 1:1	PROJECTION: SHEET 1 OF 1

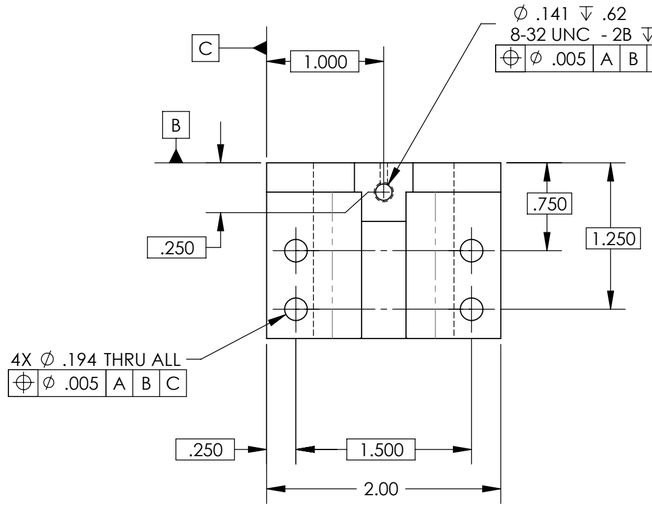
REV.	DATE	DCN #	DRAWING TREE #
v1	21 JUL 2009	E0900209	-
v2	07 OCT 2010	E1000563	-
-	-	-	-

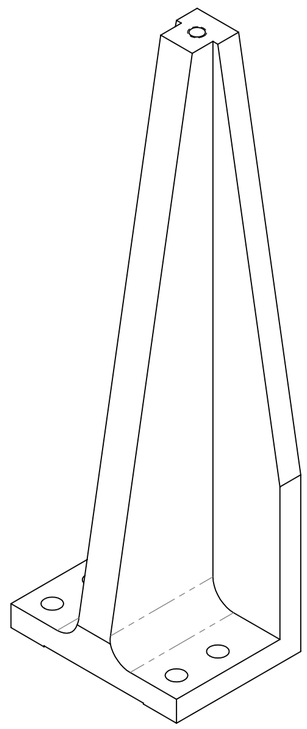
NOTES CONTINUED:

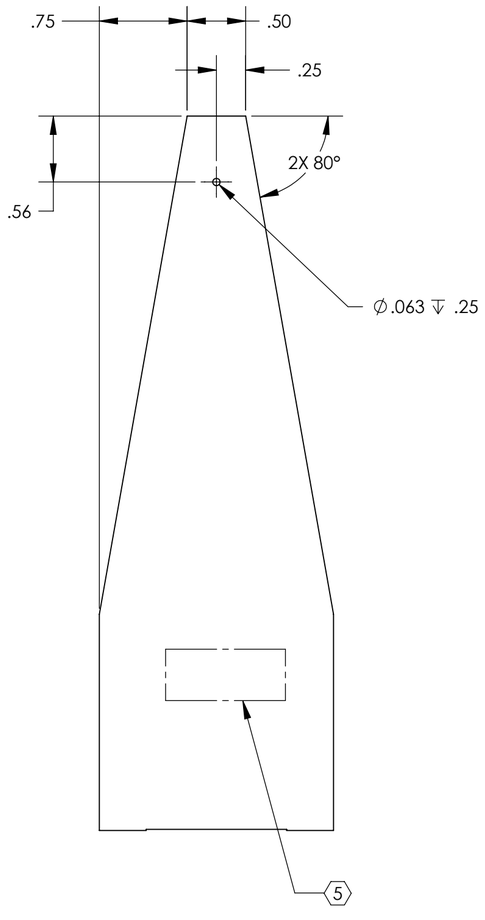
⑤ SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

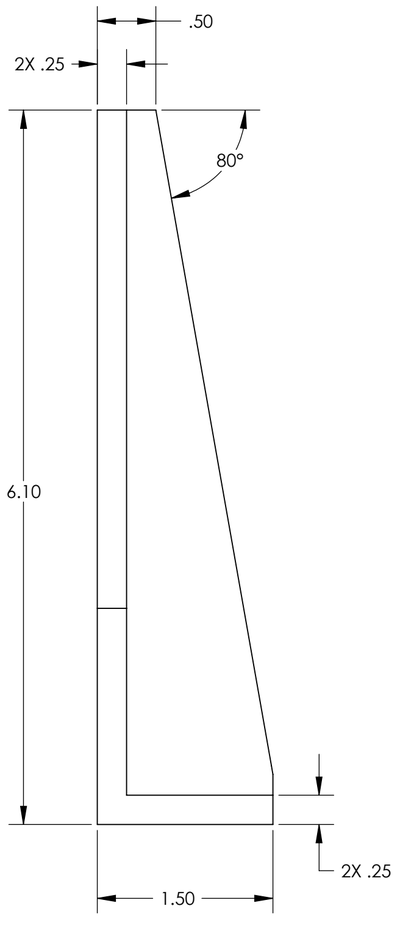
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

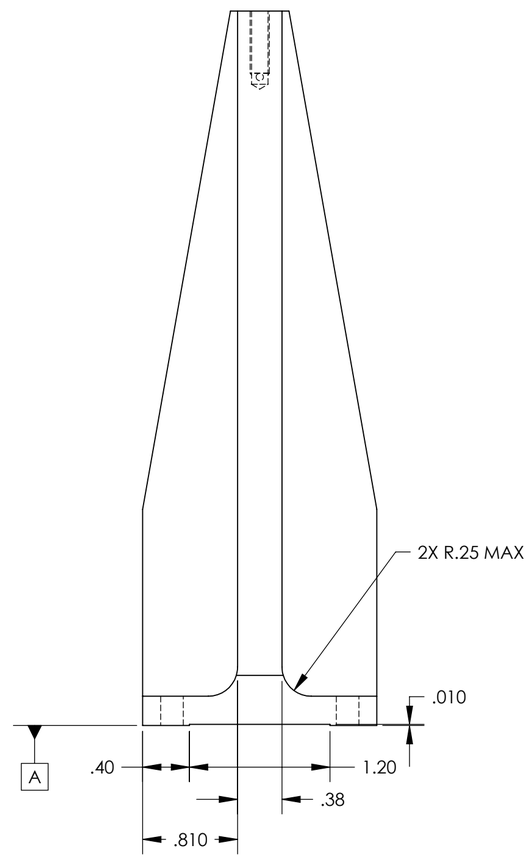
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

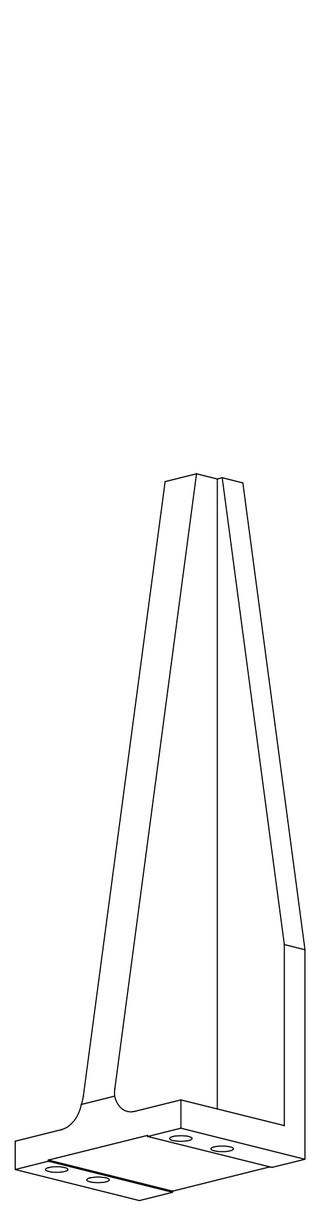












NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)							
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 0.5°	1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE, SUCH AS CINCINNATI MILACRON'S CIMTECH 410.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	BLADE GUARD RISER	
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER		
			NEXT ASSY: D0900579		DRAFTER	N.Nguyen	21 JUL 2009
					CHECKER	K. MAILAND	22 JUL 2009
					APPROVAL	C. TORRIE	22 JUL 2009

SIZE	DWG. NO.	REV.
C	D0900578	v2

SCALE: 1:1 PROJECTION: SHEET 1 OF 1

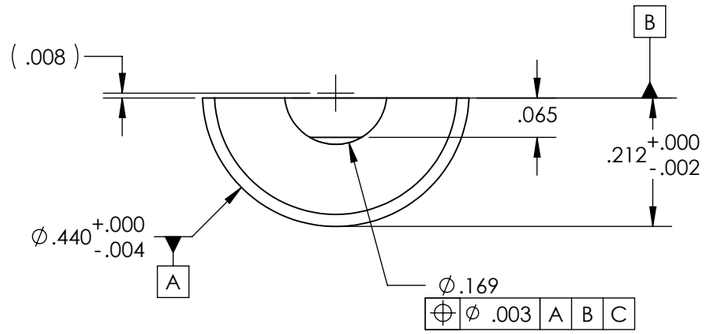
NOTES CONTINUED:

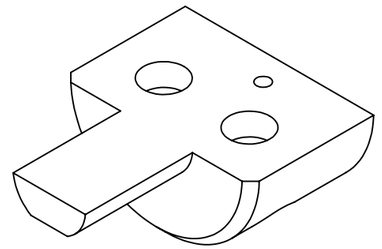
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

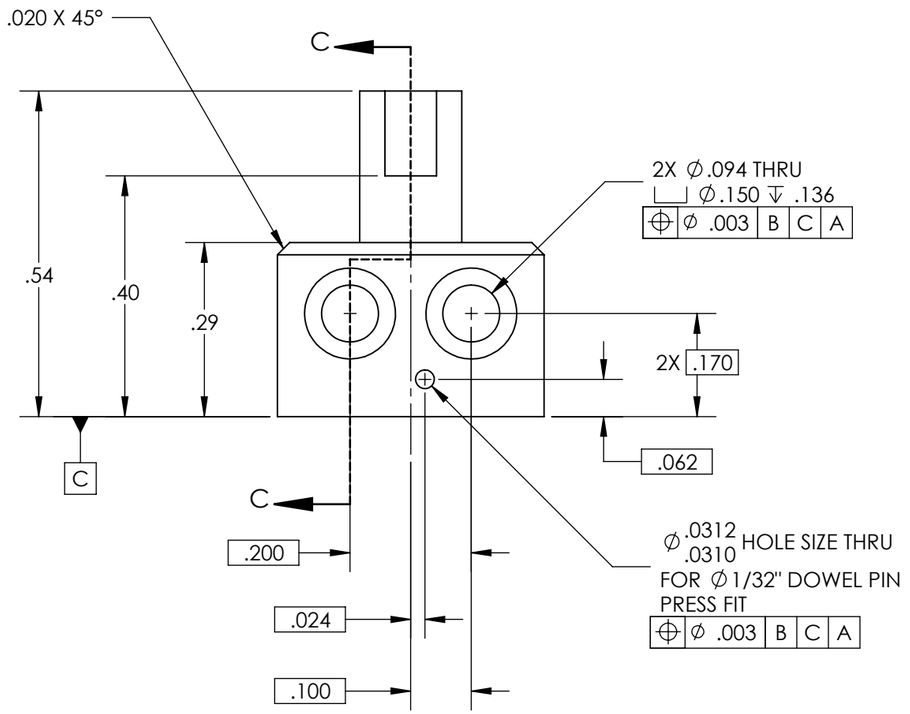
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

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

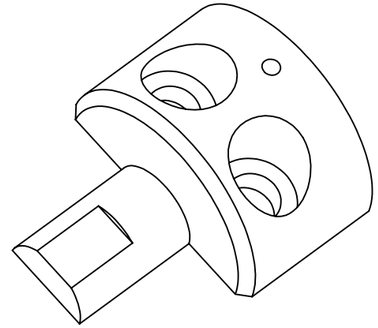
REV.	DATE	DCN #	DRAWING TREE #
v1	01 APR 2009	E0900244	
v2	07 OCT 2010	E1000563	







SECTION C-C
SCALE 4 : 1



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)					
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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME: MUSIC WIRE SPLIT CLAMP 1	
MATERIAL: 304, 316 OR 302 SSTL	FINISH: 63 µinch	NEXT ASSY: D0900586	SYSTEM: ADVANCED LIGO / SUB-SYSTEM: AOS	DESIGNER / DRAFTER: N.Nguyen 18 Aug 2009 / CHECKER: M. Smith 21 Aug 2009 / APPROVAL	SIZE: B — DWG. NO.: D0900582 — REV.: v2 — SCALE: 1:1 — PROJECTION: — SHEET 1 OF 1

D0900582_AdLIGO_AOS_D0900586_Music Wire Split Clamp 1, PART PDM REV: X-015, DRAWING PDM REV: X-013

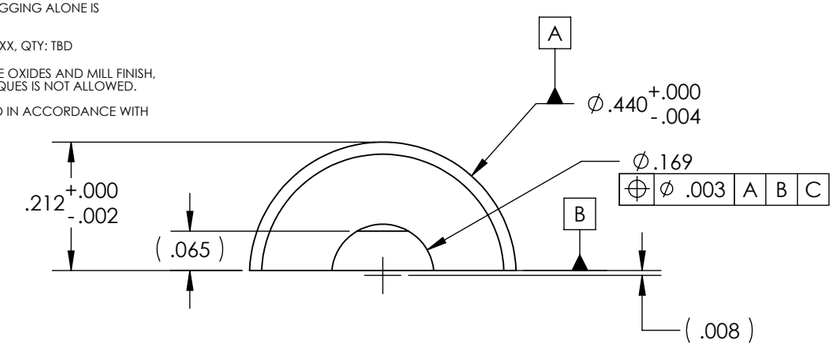
NOTES CONTINUED:

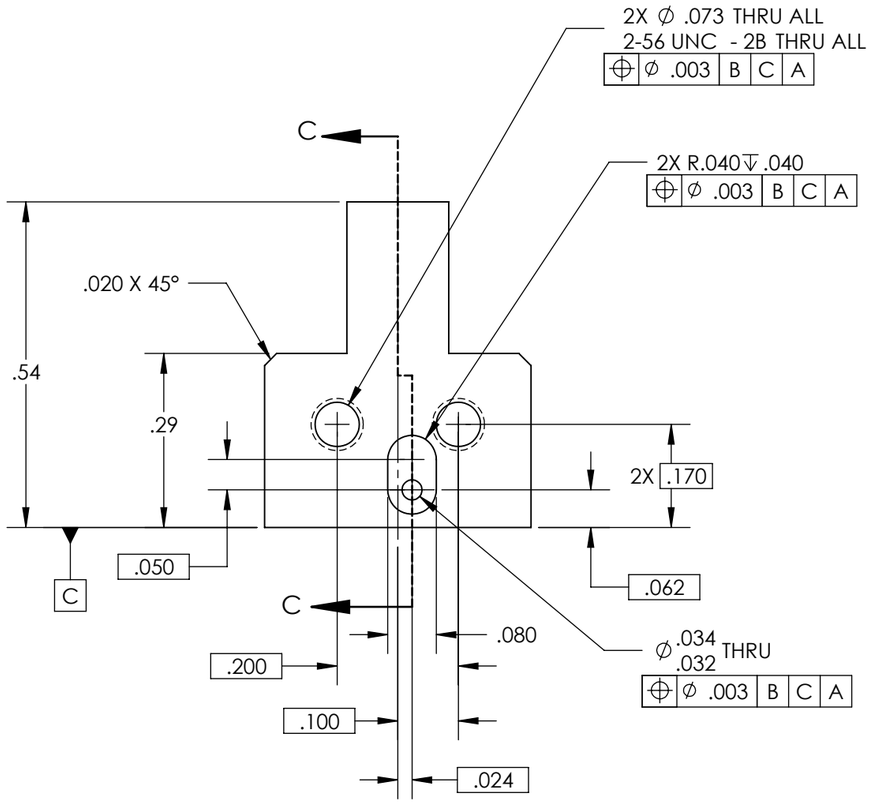
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

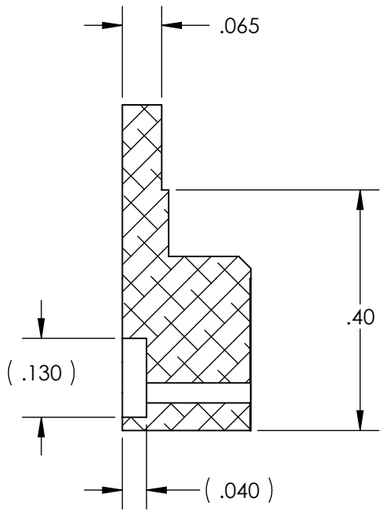
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

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

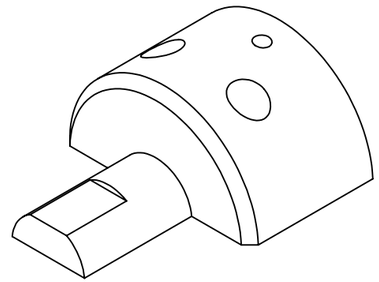
REV.	DATE	DCN #	DRAWING TREE #
v1	01 APR 2009	E0900244	
v2	07 OCT 2010	E1000563	
v3	20 DEC 2010	E1000563	

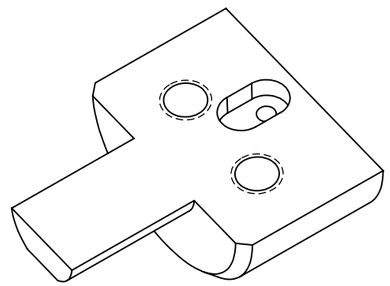






SECTION C-C
SCALE 4 : 1





NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

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.

MATERIAL: 304, 316 OR 302 SSTL
FINISH: 63 µinch

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PART NAME: MUSIC WIRE SPLIT CLAMP 2

SYSTEM: ADVANCED LIGO
SUB-SYSTEM: AOS
NEXT ASSY: D0900586

DESIGNER			
DRAFTER	N. Nguyen	18 Aug 2009	
CHECKER	M. Smith	21 Aug 2009	
APPROVAL			

SIZE: B — DWG. NO.: D0900583 — REV.: v3
SCALE: 1:1 — PROJECTION: — SHEET 1 OF 1

D0900583_AdLIGO_AOS_D0900586_Music Wire Split Clamp 2, PART PDM REV: X-011, DRAWING PDM REV: X-012

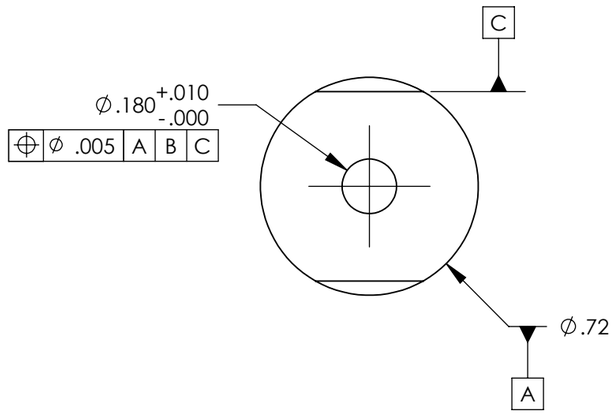
NOTES CONTINUED:

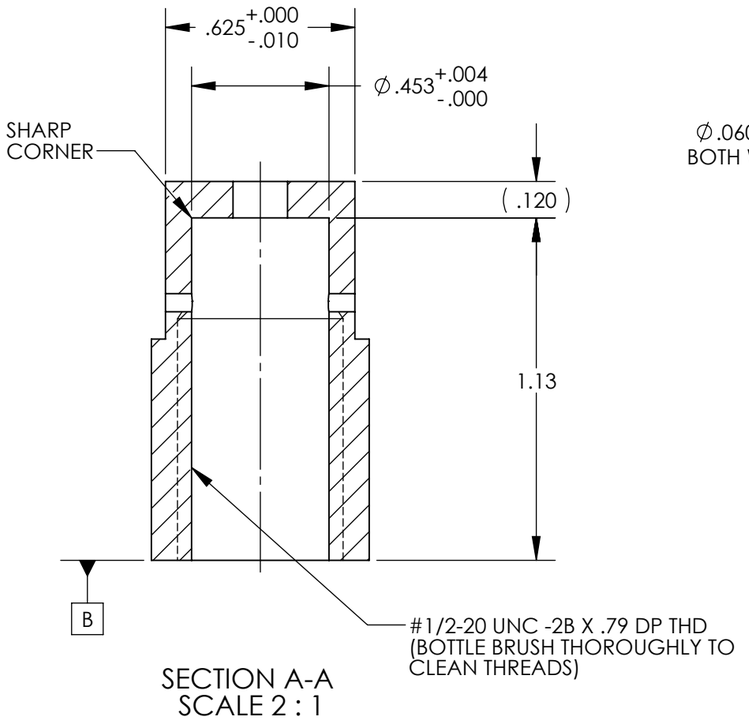
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

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

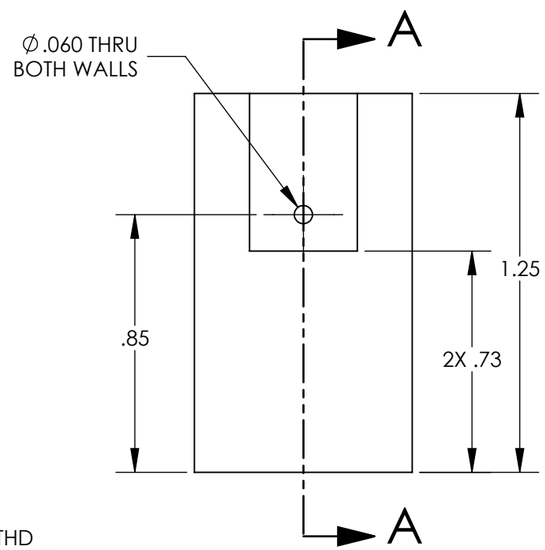
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

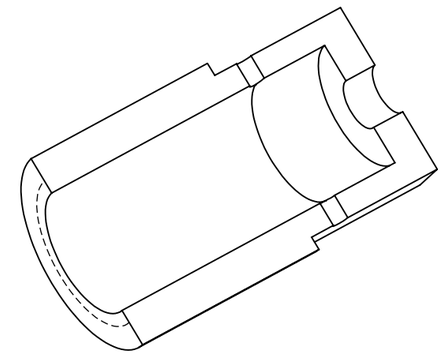
REV.	DATE	DCN #	DRAWING TREE #
v1	01 APR 2009	E0900244	
v2	07 OCT 2010	E1000563	





SECTION A-A
SCALE 2 : 1





D0900588_AdLIGO_AOS_FARADAY ISOLATOR_Wire Adjustable Adapter, PART PDM REV: X-008, DRAWING PDM REV: X-013

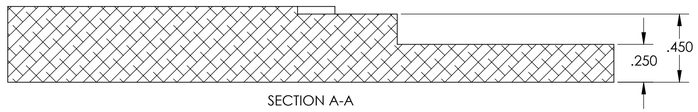
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)							
DIMENSIONS ARE IN TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 0.5°	1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: WIRE ADJUSTABLE ADAPTER		
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER		
			NEXT ASSY: FARADAY ISOLATOR		DRAFTER: N.Nguyen	12 May 09	SIZE: B — DWG. NO.: D0900588 — REV.: v2
					CHECKER		
					APPROVAL		SCALE: 1:1 — PROJECTION: — SHEET 1 OF 1

NOTES CONTINUED:

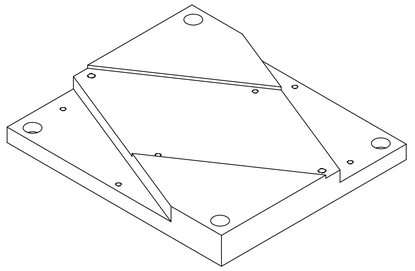
Ⓢ SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

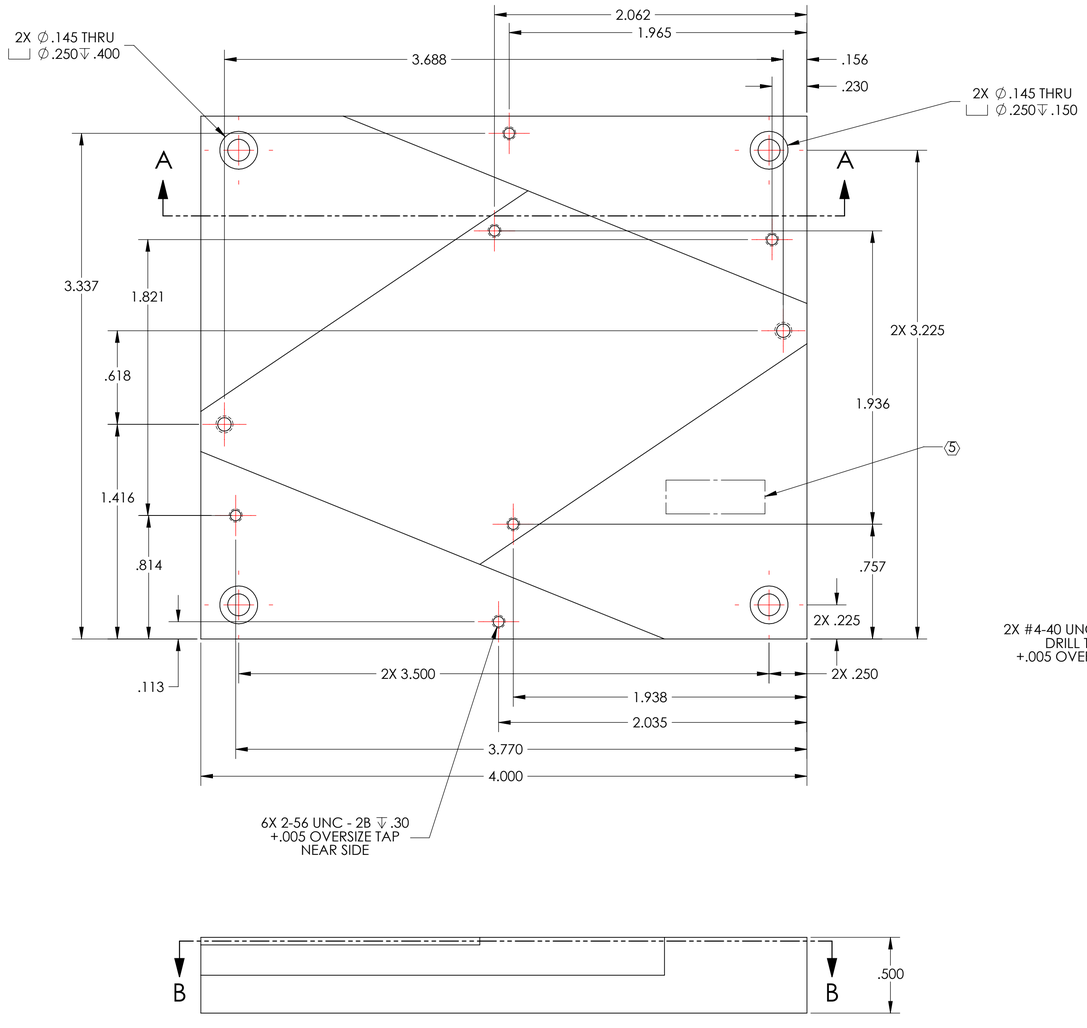
REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	

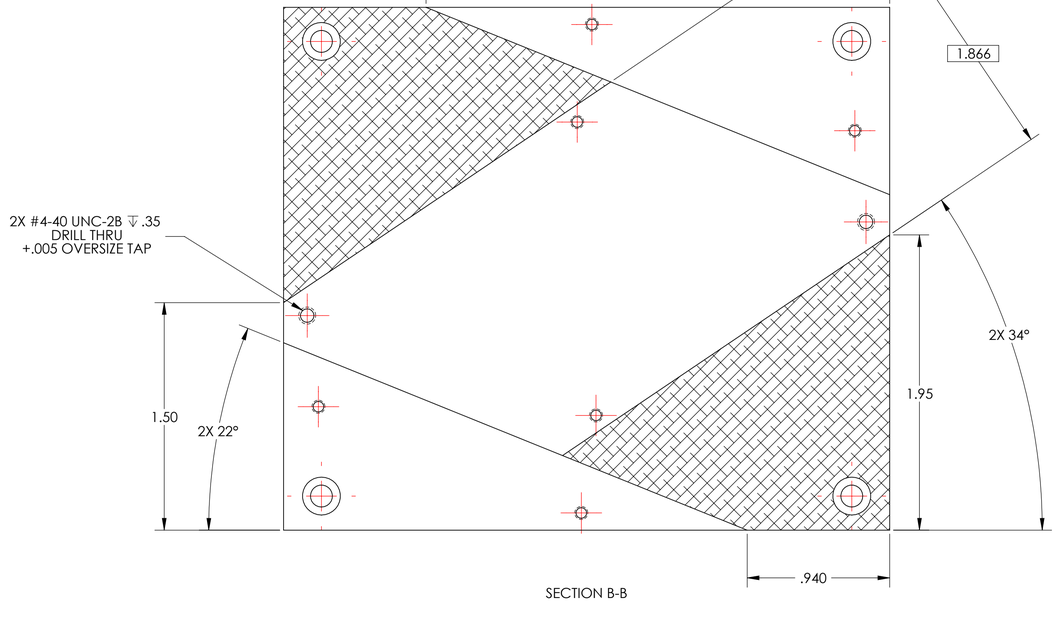


SECTION A-A



GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE





SECTION B-B

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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: PRISM MOUNT BASE_LH
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	
			NEXT ASSY: D0900614		

DESIGNER	TQ. NGUYEN	21 JUL 2010	SIZE: D	DWG. NO.: D0900616	REV.: v1
DRAFTER	TQ. NGUYEN	26 AUG 2010			
CHECKER	M. SMITH		SCALE: 2:1	PROJECTION:	SHEET 1 OF 1
APPROVAL	D. COYNE				

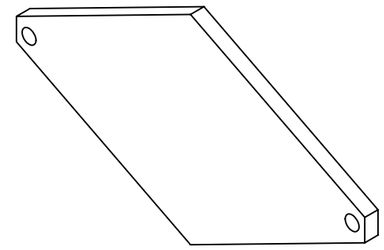
D0900616_aLIGO_AOS_D0900614_Faraday Isolator Prism Block_LH, PART PDM REV: X.007, DRAWING PDM REV: X.005

NOTES CONTINUED:

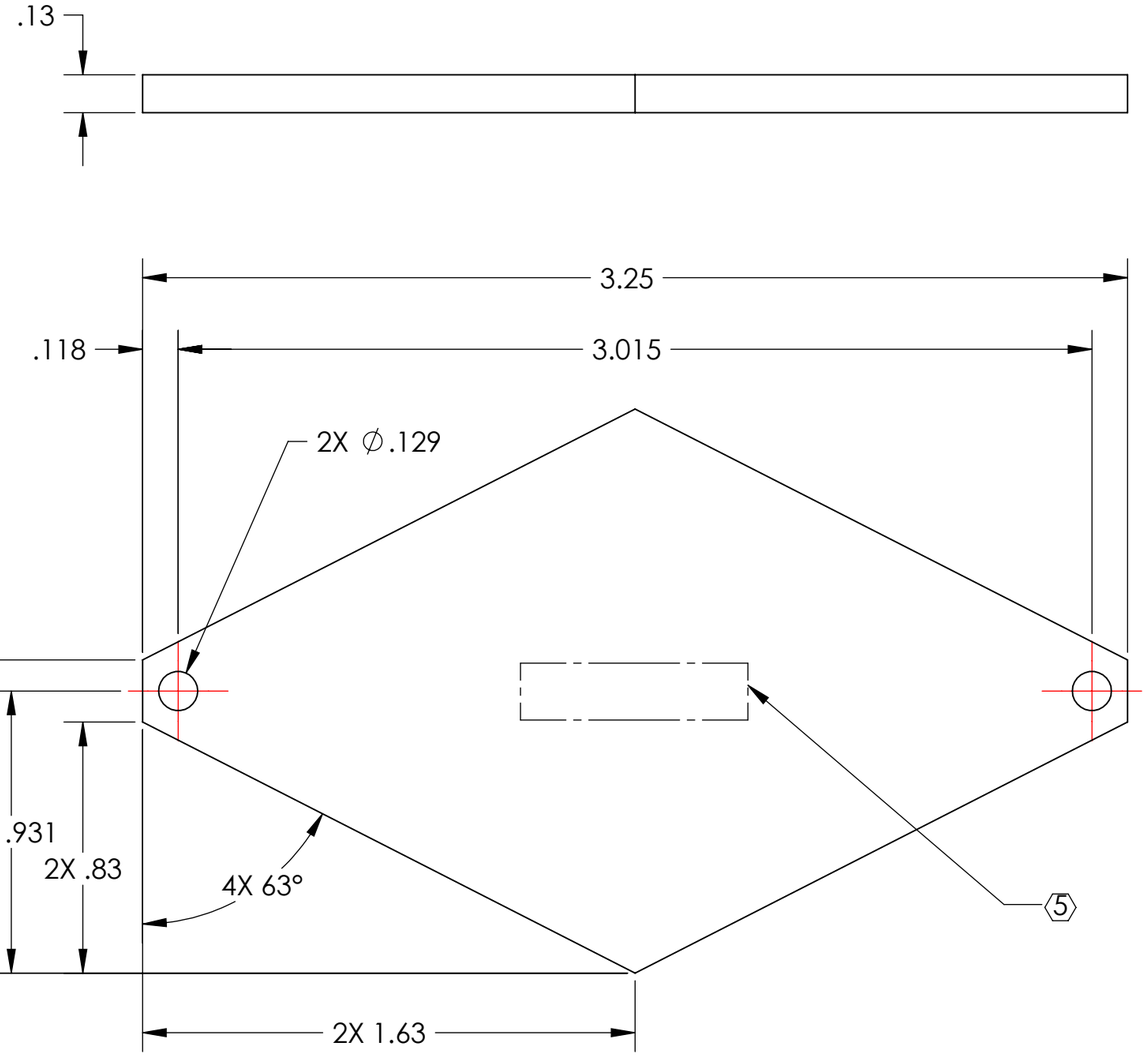
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

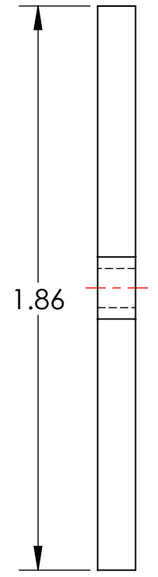
6. APPROXIMATE WEIGHT = 0.041LB.
7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

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



GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE





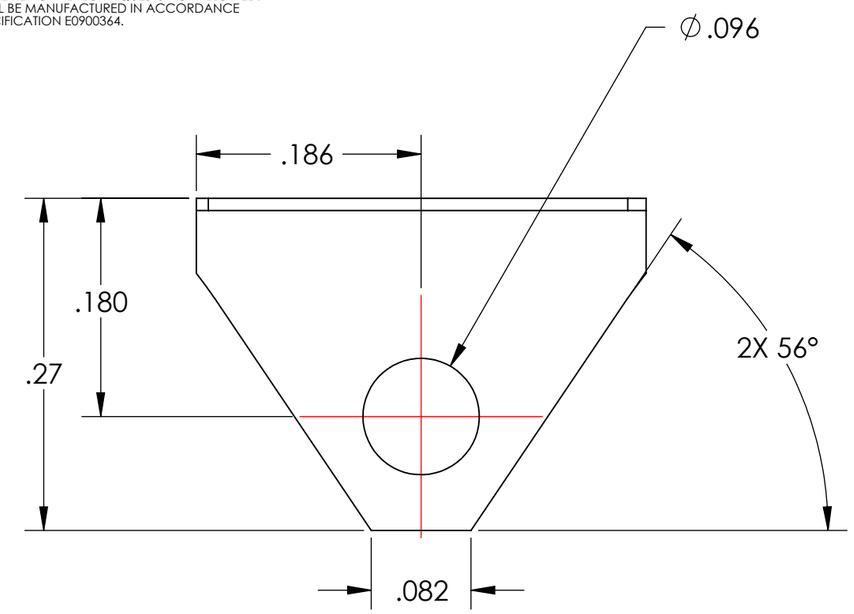
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)									
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 0.5°	1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: OPTICAL PRISM TOP PLATE				
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER: TQ. NGUYEN 12 JUL 2010	SIZE: B	DWG. NO.: D0900618	REV.: v1	
			NEXT ASSY: D0900615-D0900614		DRAFTER: TQ. NGUYEN 27 AUG 2010				
					CHECKER: M. SMITH				
					APPROVAL: D. COYNE	SCALE: 2:1	PROJECTION:	SHEET 1 OF 1	

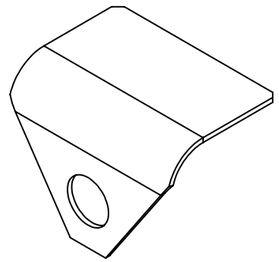
D0900618_aLIGO_AOS_D0900614_Faraday Isolator Prism Clamp, PART PDM REV: X-003, DRAWING PDM REV: X-006

NOTES CONTINUED:

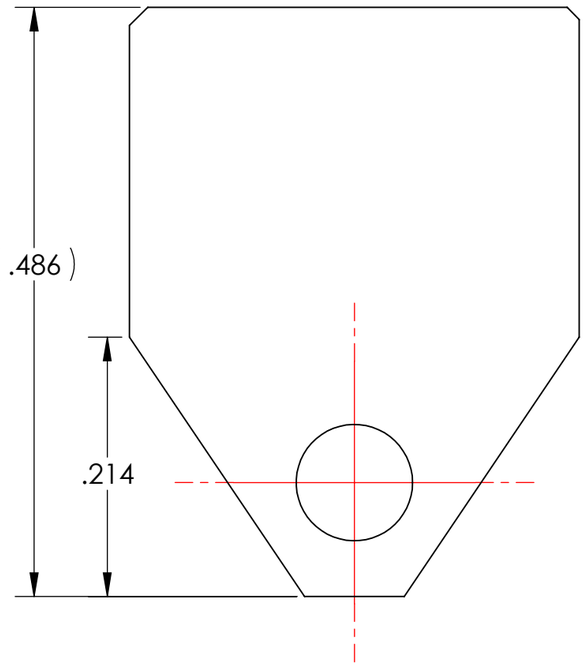
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

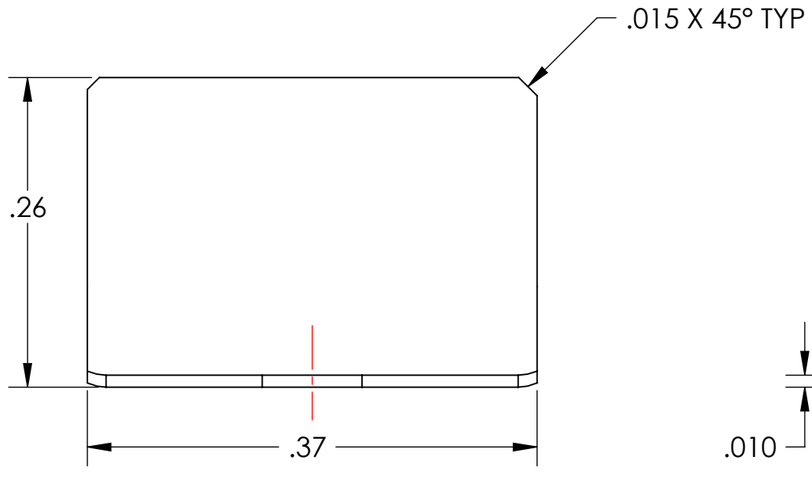


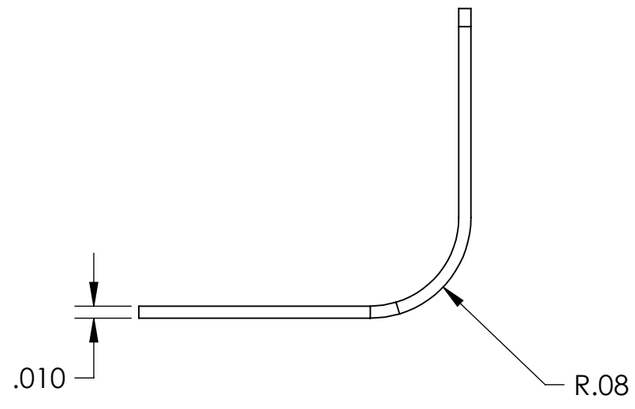


GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE



FLAT PATTERN





NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)							
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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: CLIP		
	MATERIAL: 304 SSTL	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER: TQ. NGUYEN 12 JUL 2010 DRAFTER: TQ. NGUYEN 23 AUG 2010 CHECKER: M. SMITH APPROVAL: D. COYNE	SIZE: B	DWG. NO.: D0900619 REV.: v1
			NEXT ASSY: D0900614-D0900615			SCALE: 8:1 PROJECTION:	SHEET 1 OF 1

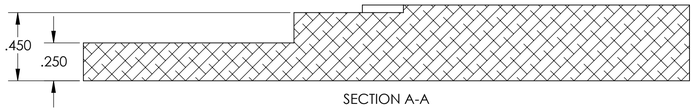
D0900619_aLIGO_AOS_D0900614_Faraday Isolator SPRING Clip, PART PDM REV: X-009, DRAWING PDM REV: X-006

NOTES CONTINUED:

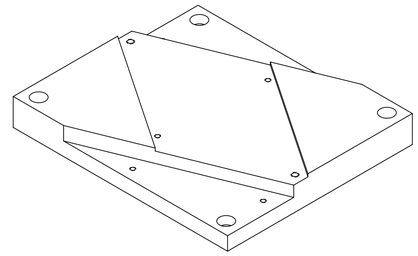
Ⓢ SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

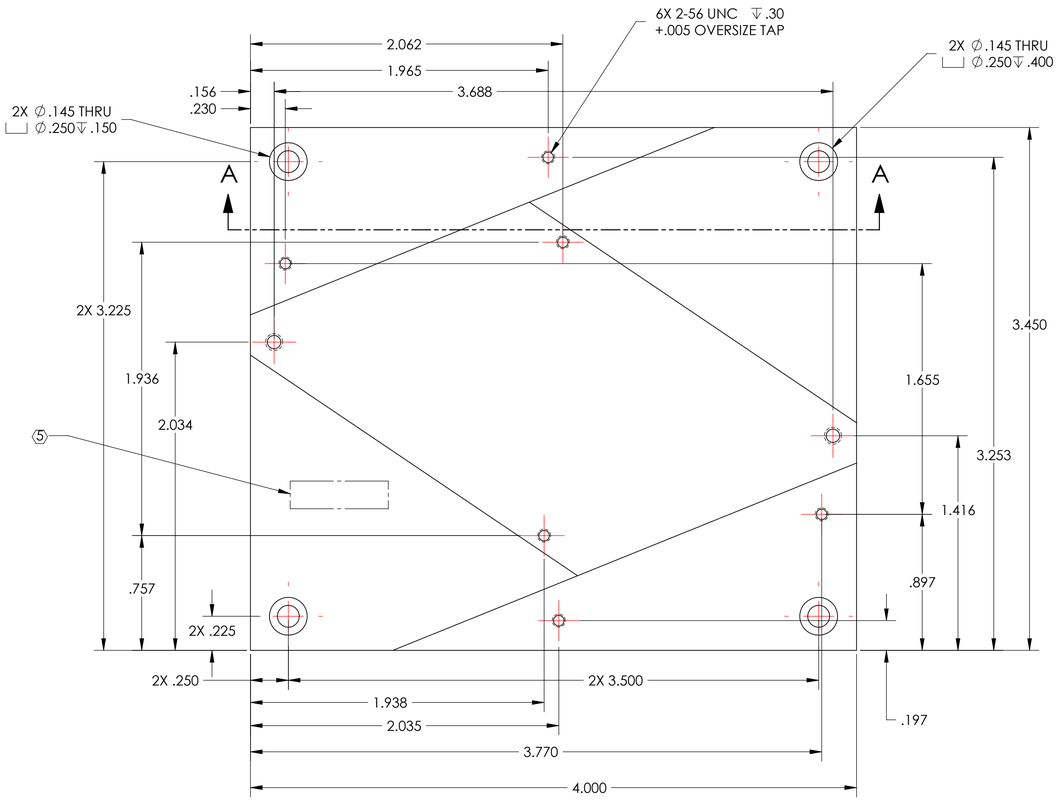
REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	E1000474
-	-	-	

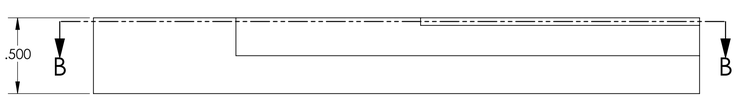


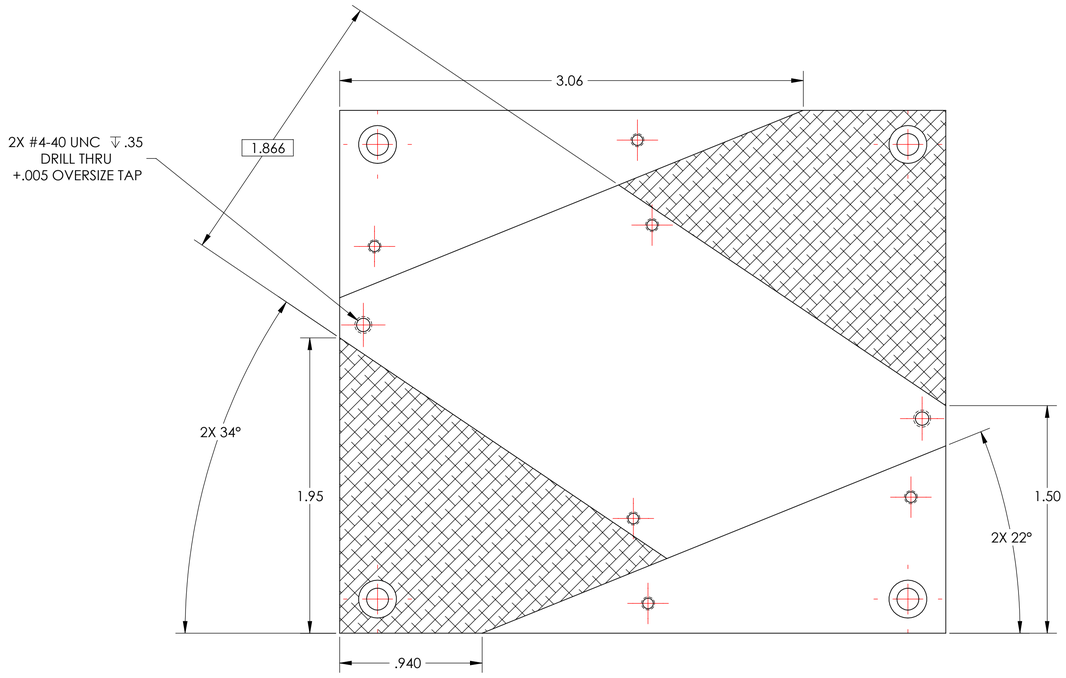
SECTION A-A



GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE







SECTION B-B

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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: PRISM MOUNT BASE_RH				
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER: TQ. NGUYEN	16 JUL 2010	SIZE: D	DWG. NO.: D0900620	REV.: v1
			NEXT ASSY: D0900615		DRAFTER: TQ. NGUYEN	20 AUG 2010			
					CHECKER: M. SMITH		SCALE: 2:1	PROJECTION:	SHEET 1 OF 1
					APPROVAL: D. COYNE				

D0900620_aLIGO_AOS_D0900615_Faraday Isolator Prism Mount Base RH, PART PDM REV: X-011, DRAWING PDM REV: X-011

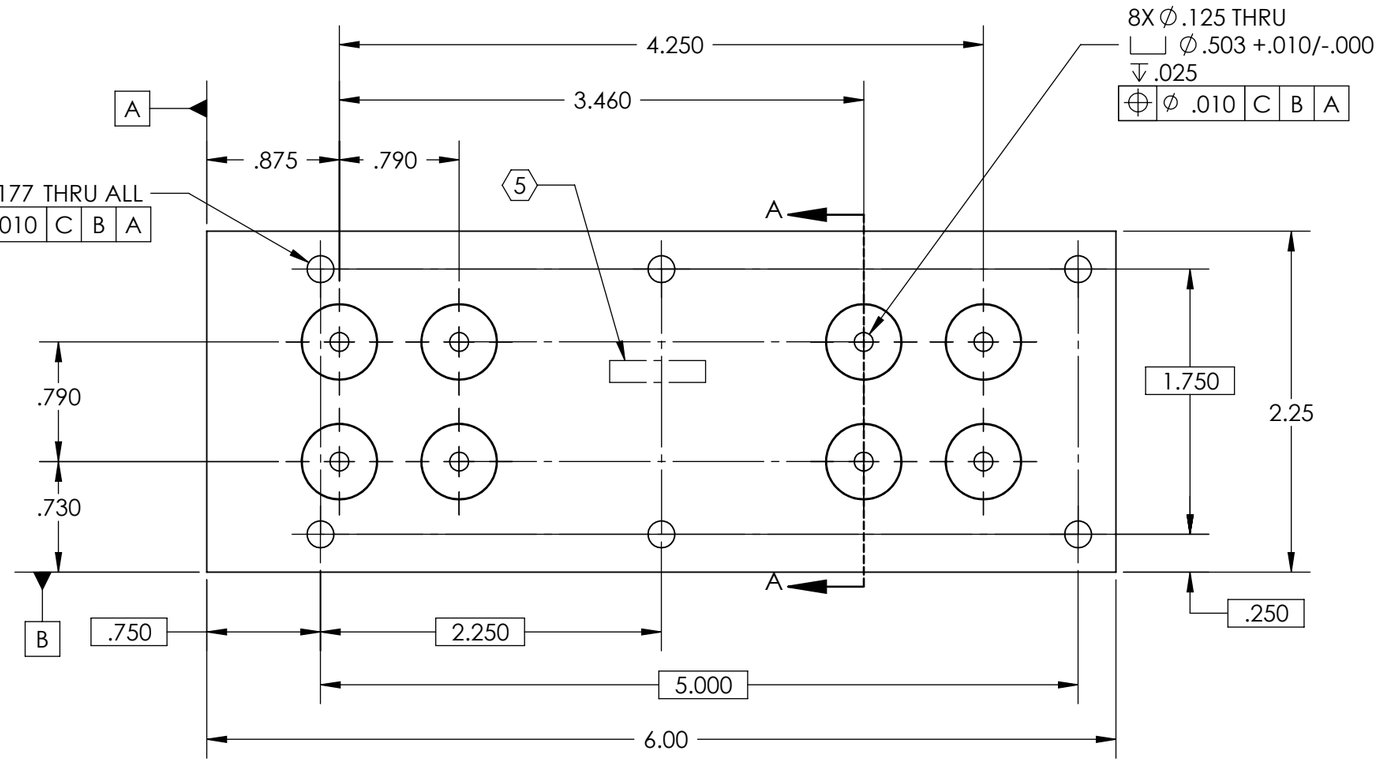
NOTES CONTINUED:

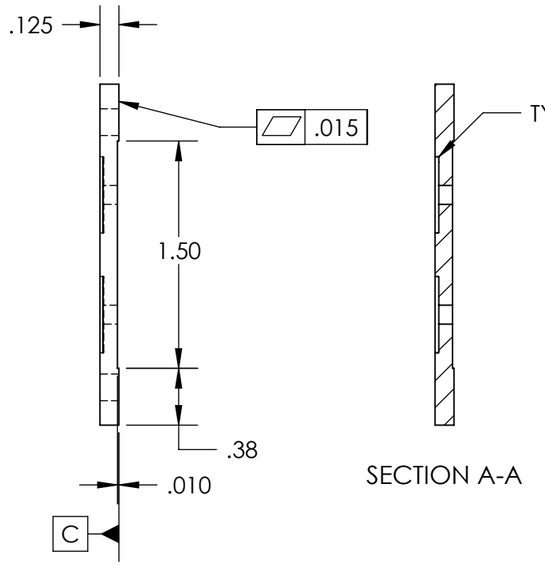
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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





SECTION A-A

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 430F OR 430FR

FINISH 63 µinch

NEXT ASSY D0900048

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM ADVANCED LIGO | **SUB-SYSTEM** AOS

PART NAME MAGNET ATTACHMENT PLATE

DESIGNER			
DRAFTER	N.Nguyen	26 Jul 2009	
CHECKER	K. Mailand	28 Jul 2009	
APPROVAL	C. Torrie	28 Jul 2009	

SIZE B | **DWG. NO.** D0900778 | **REV.** v2

SCALE: 1:1 | **PROJECTION:** | SHEET 1 OF 1

D0900778_AdLIGO_AOS_FI D0900048_Magnet Attachment Plate, PART PDM REV: X-020, DRAWING PDM REV: X-013

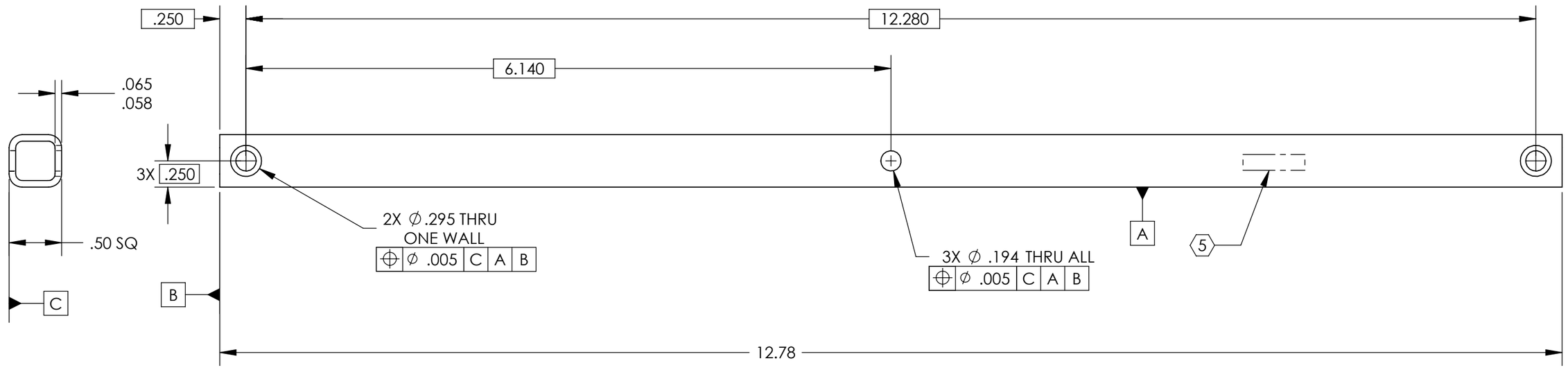
NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER 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)

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.

MATERIAL 6061-T6 Al

FINISH stock tubing

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM ADVANCED LIGO **SUB-SYSTEM** AOS

NEXT ASSY D0900579

PART NAME BLADE GUARD CROSSPIECE

DESIGNER		
DRAFTER	N.Nguyen	19 Jun 2009
CHECKER	K. Mailand	21 Jul 2009
APPROVAL	C. Torrie	22 Jul 2009

SIZE B **DWG. NO.** D0901271 **REV.** v3

SCALE: 1:4 **PROJECTION:** SHEET 1 OF 1

D0901271_AdLIGO_AOS_FI D0900579_Blade Guard Crosspiece, PART PDM REV: X-007, DRAWING PDM REV: X-010

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

NOTES CONTINUED:

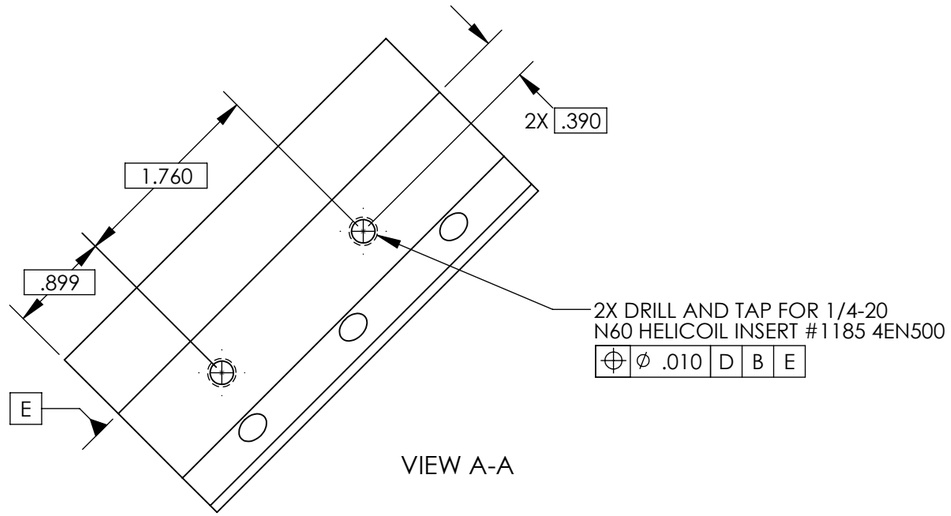
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

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

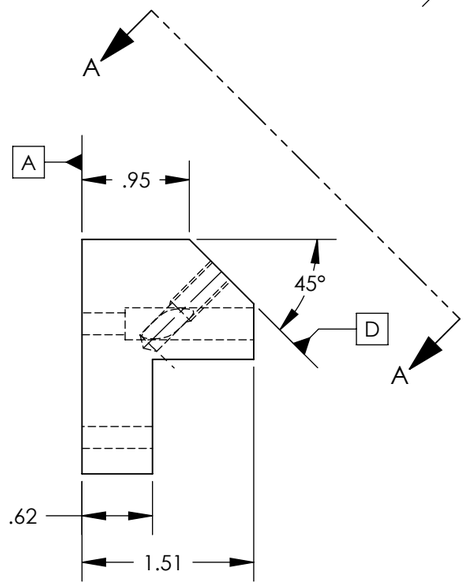
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

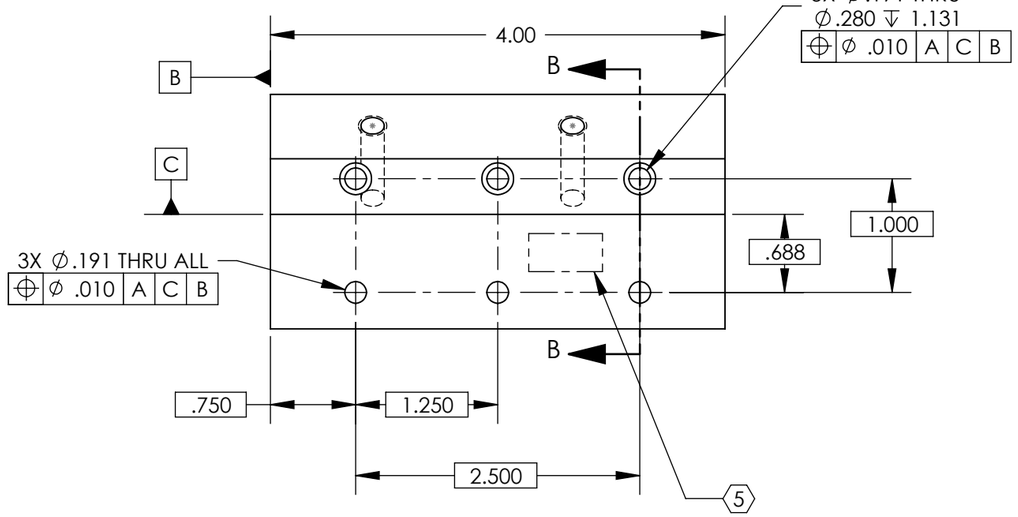
8. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4

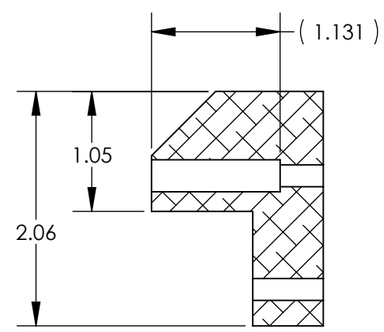
9. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL. AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS.



VIEW A-A







SECTION B-B

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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME: BLADE CLAMP PLATFORM	
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO / SUB-SYSTEM: AOS	NEXT ASSY: -	DESIGNER / DRAFTER: N.Nguyen 30 Jul 2009 / CHECKER: M. SMITH 05 Aug 2009 / APPROVAL
				SIZE: B	DWG. NO.: D0901514
				SCALE: 3:4	PROJECTION: SHEET 1 OF 1

REV: v1

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

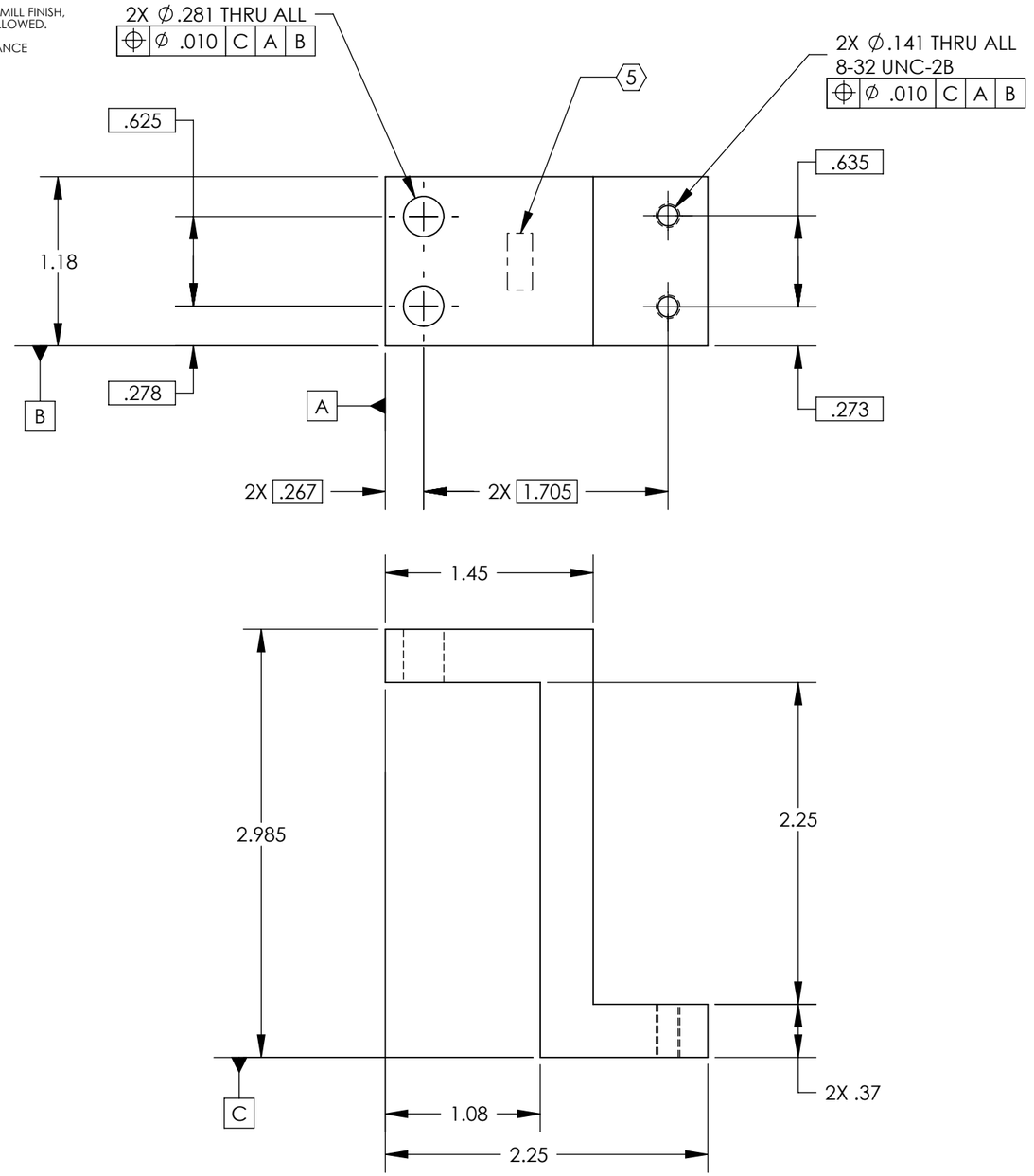
NOTES CONTINUED:

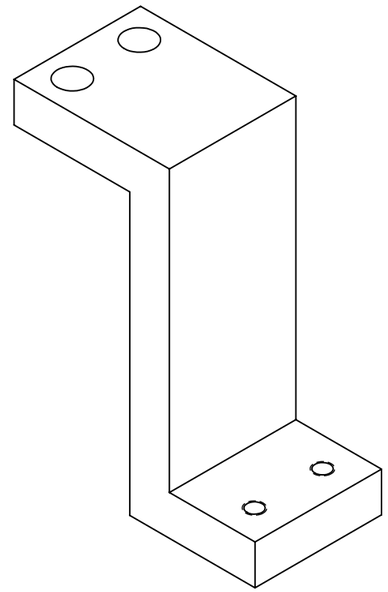
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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





NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)								
DIMENSIONS ARE IN INCHES. 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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: MAGNETIC PLATE MOUNTING FRONT BRACKET			
MATERIAL: 6061-T6 Al	FINISH: 63 µinch	NEXT ASSY: D0900136	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER			SIZE: B
					DRAFTER	N.Nguyen	05 Aug 2009	DWG. NO.: D0901569
					CHECKER	M. Smith	05 Aug 2009	REV.: v2
					APPROVAL			SCALE: 1:1 PROJECTION: SHEET 1 OF 1

D0901569_AdLIGO_AOS_FI D0900136_Magnetic Plate Mounting Front Bracket, PART PDM REV: X-003, DRAWING PDM REV: X-009

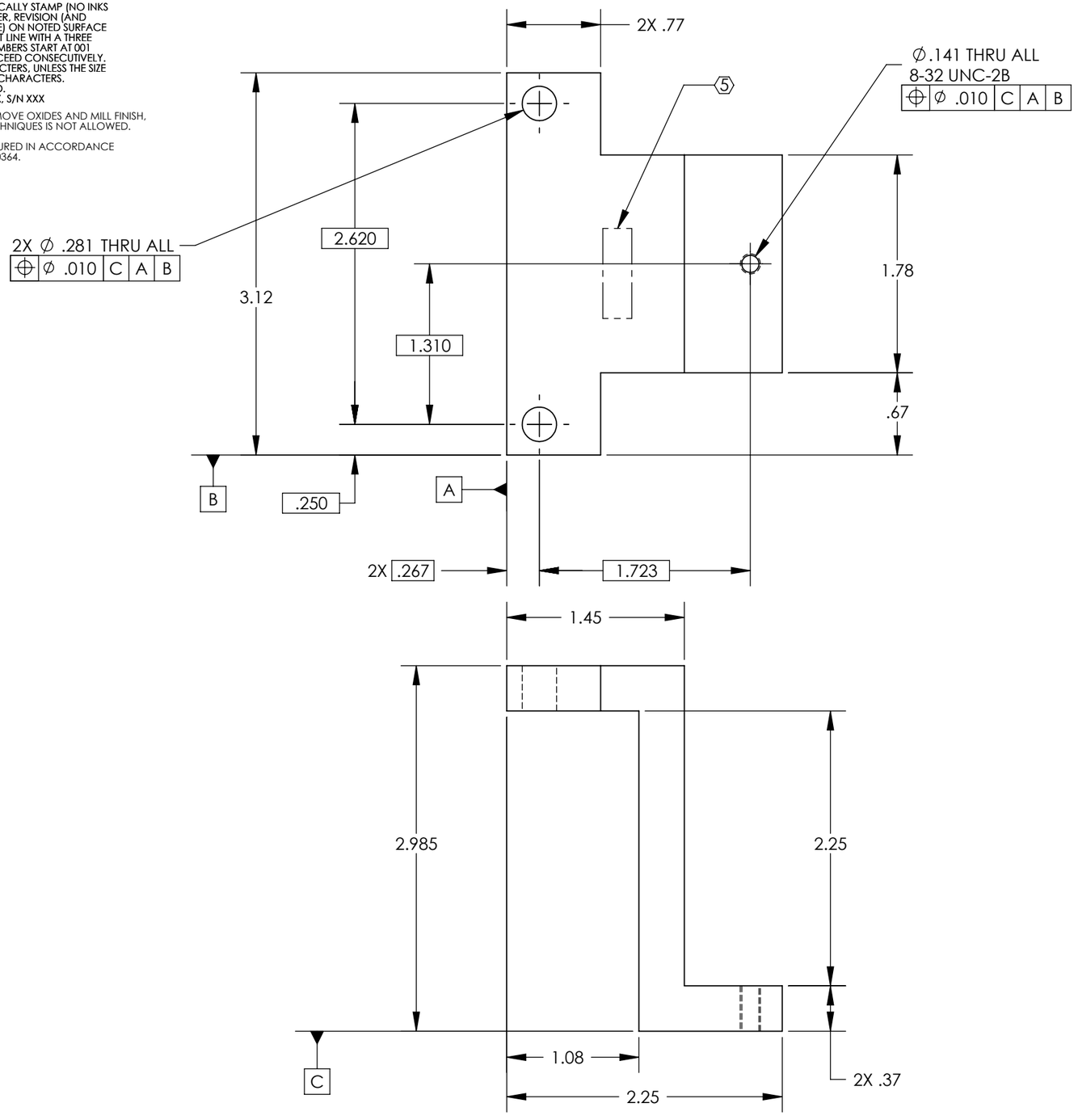
NOTES CONTINUED:

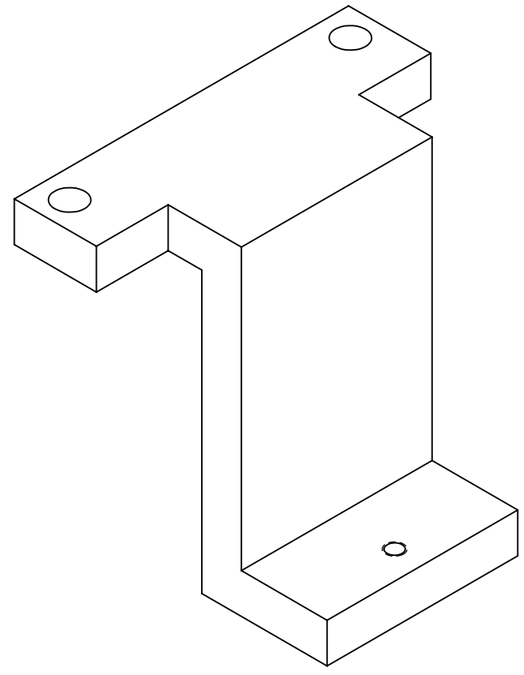
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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





NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)							
DIMENSIONS ARE IN INCHES. 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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: MAGNETIC PLATE MOUNTING BACK BRACKET		
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER		
			NEXT ASSY: D0900136		DRAFTER: N.Nguyen 04 Aug 2009	SIZE: B	DWG. NO.: D0901570 REV.: v2
					CHECKER: M. Smith 05 Aug 2009		
					APPROVAL	SCALE: 1:1	PROJECTION: SHEET 1 OF 1

D0901570_AdLIGO_AOS_FI D0900136_Magnetic Plate Mounting Back Bracket, PART PDM REV: X-004, DRAWING PDM REV: X-007

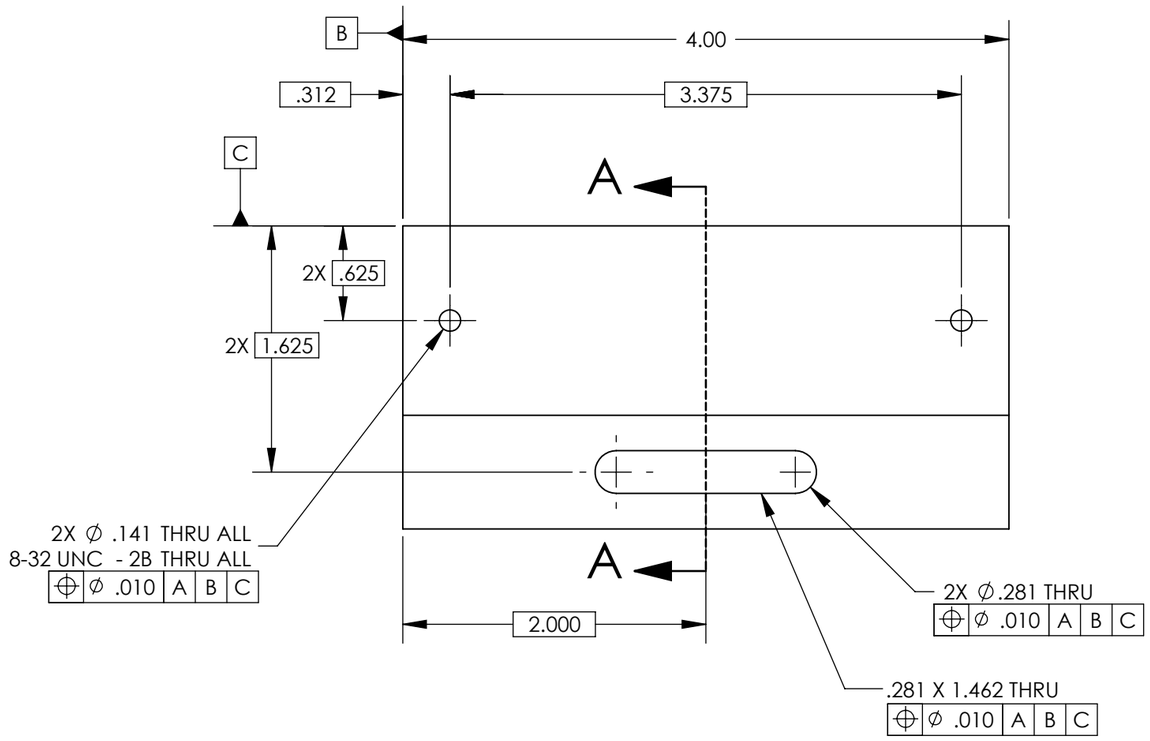
NOTES CONTINUED:

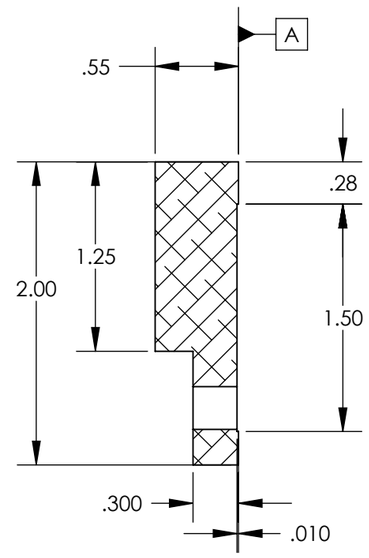
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

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

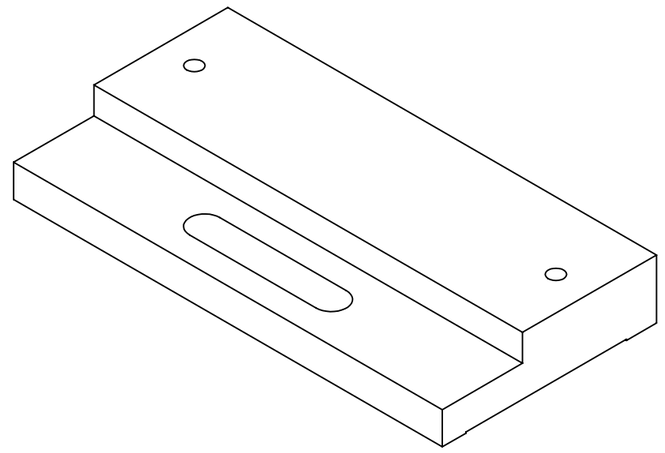
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	





SECTION A-A



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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: TABLE BALANCE WEIGHT		
	MATERIAL: 304, 316 OR 302 SSTL	FINISH: 125 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER		
			NEXT ASSY: D0900623		DRAFTER: M.RUIZ 09 AUG 2010	SIZE: B	DWG. NO.: D0901764 REV: v1
					CHECKER		
					APPROVAL	SCALE: 1:1	PROJECTION: SHEET 1 OF 1

D0901764_AdLIGO_AOS_FI D0900623_Table Balance Weight, PART PDM REV: X-020, DRAWING PDM REV: X-013

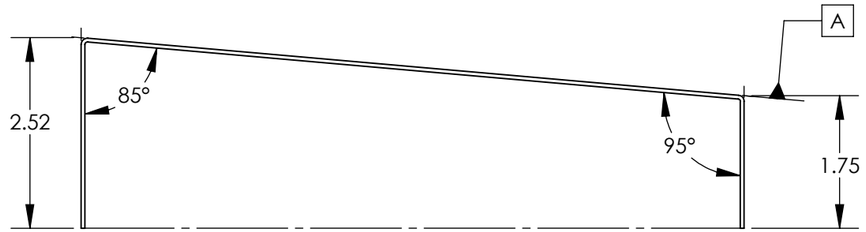
NOTES CONTINUED:

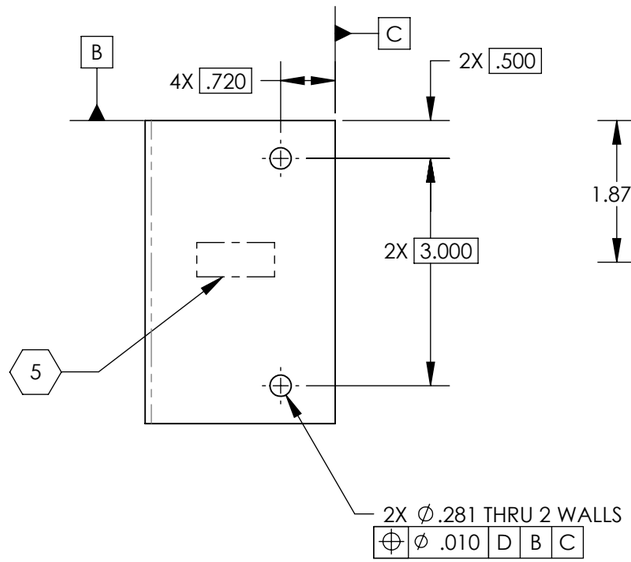
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

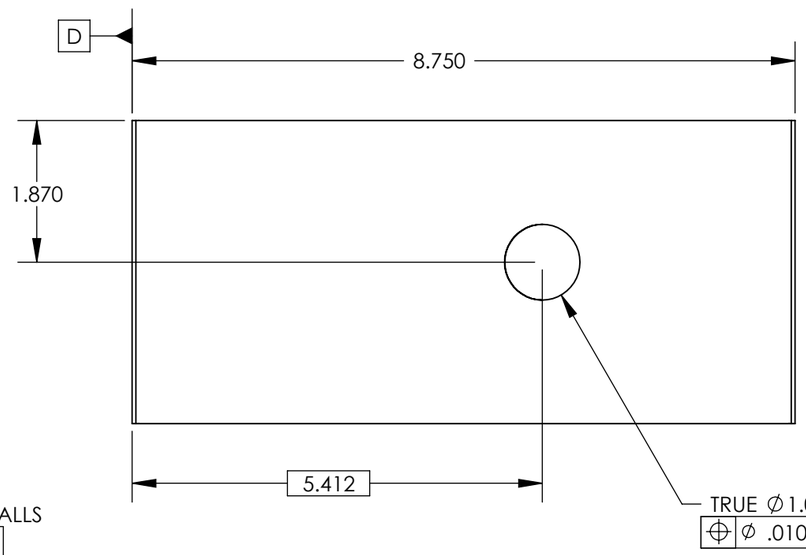
6. PORCELAIN COAT PER SPECIFICATIONS E1000083

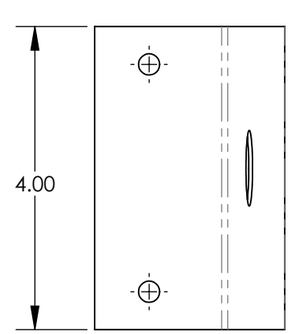
7. MATERIAL: MACHINE FINISH AS RECEIVED

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









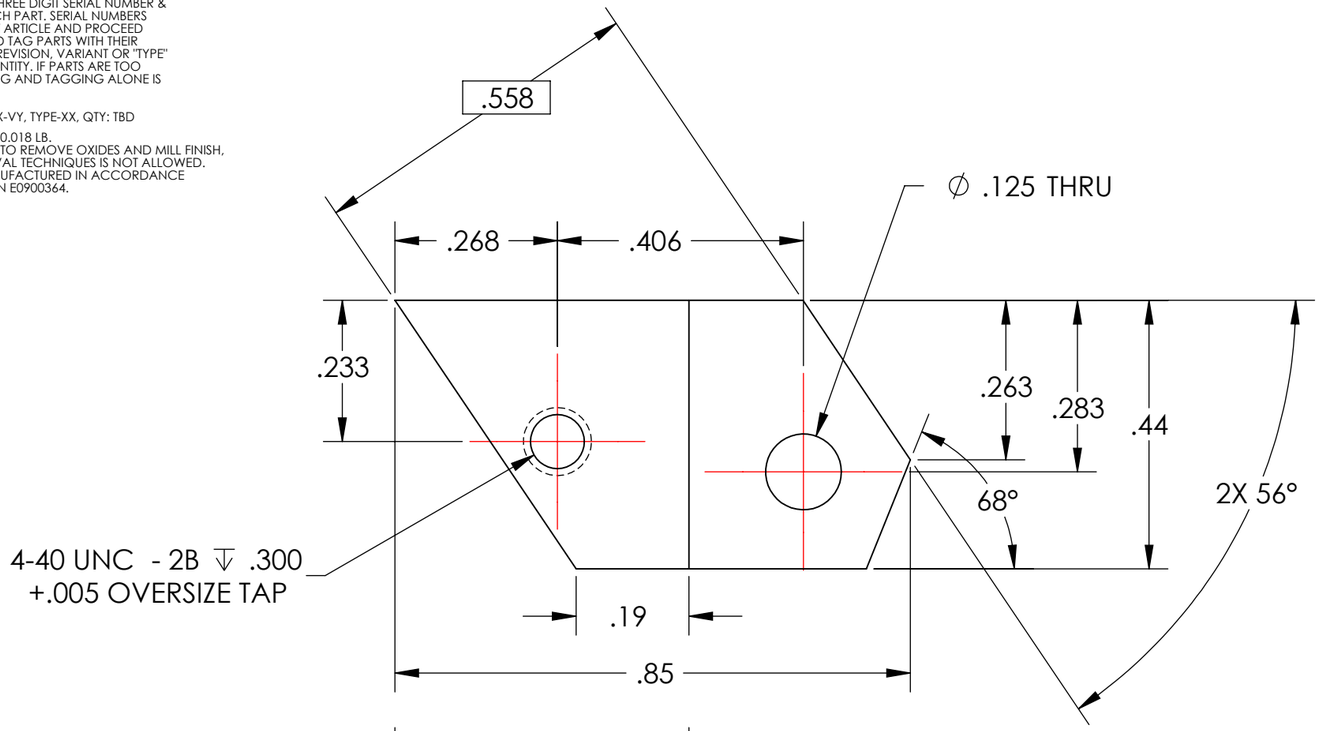
D0902845_AdLIGO_AOS_FI D0900136_Reflection Baffle, PART PDM REV: X-010, DRAWING PDM REV: X-007

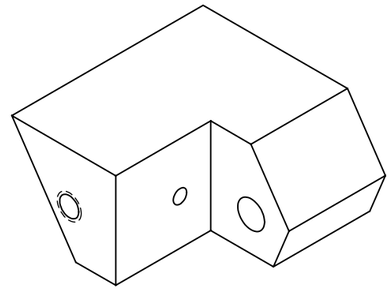
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)			
DIMENSIONS ARE IN TOLERANCES: .XX ± .03 .XXX ± .010 ANGULAR ± 1.0°	1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE. MATERIAL: A424 TYPE I, 18GA, SSTL 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 DRAFTER: MRUIZ 04/09/2010 CHECKER APPROVAL SIZE: B DWG. NO.: D0902845 REV.: v2 SCALE: 1:2 PROJECTION: SHEET 1 OF 1

NOTES CONTINUED:

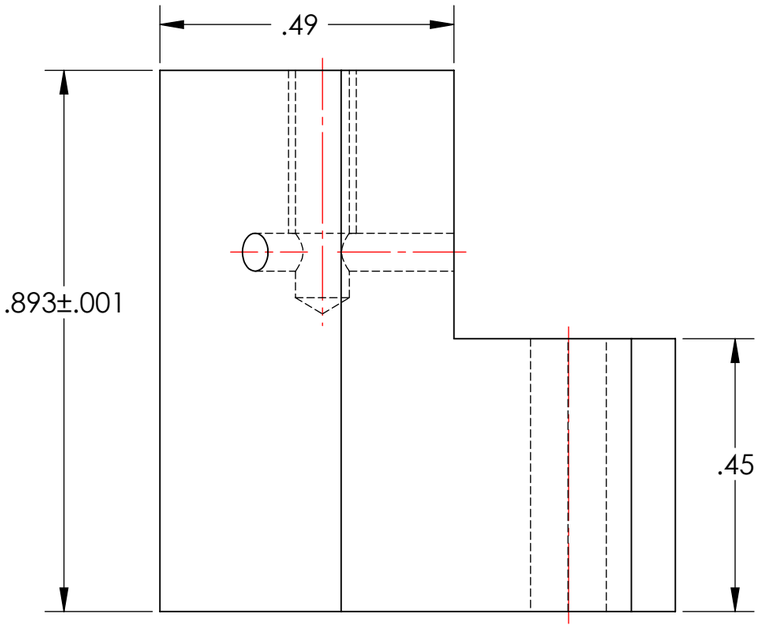
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

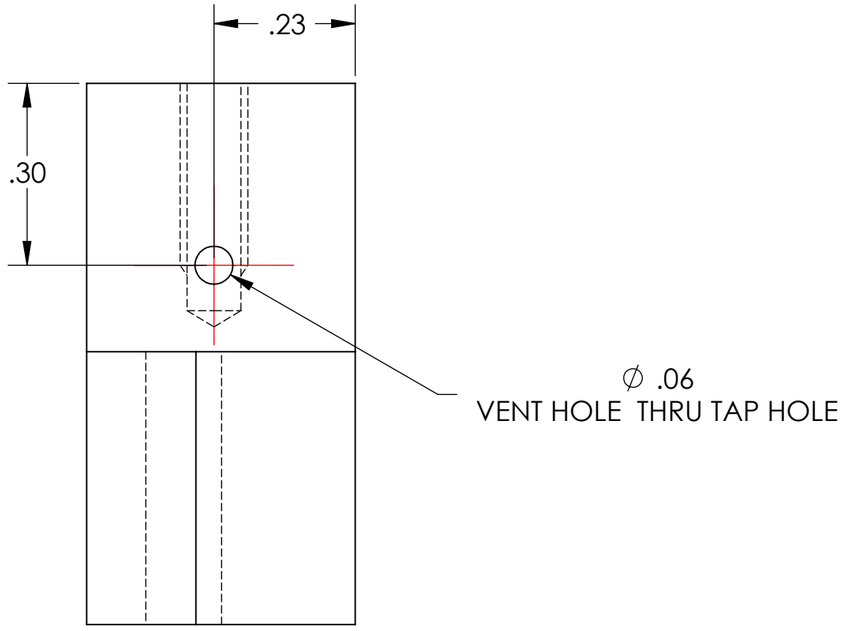
REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-





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: 6061-T6 Al
FINISH: 63 µinch

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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

PART NAME: FIXED STOP_RH

DESIGNER	TQ. NGUYEN	15 JUL 2010
DRAFTER	TQ. NGUYEN	20 AUG 2010
CHECKER	M. SMITH	
APPROVAL	D. COYNE	

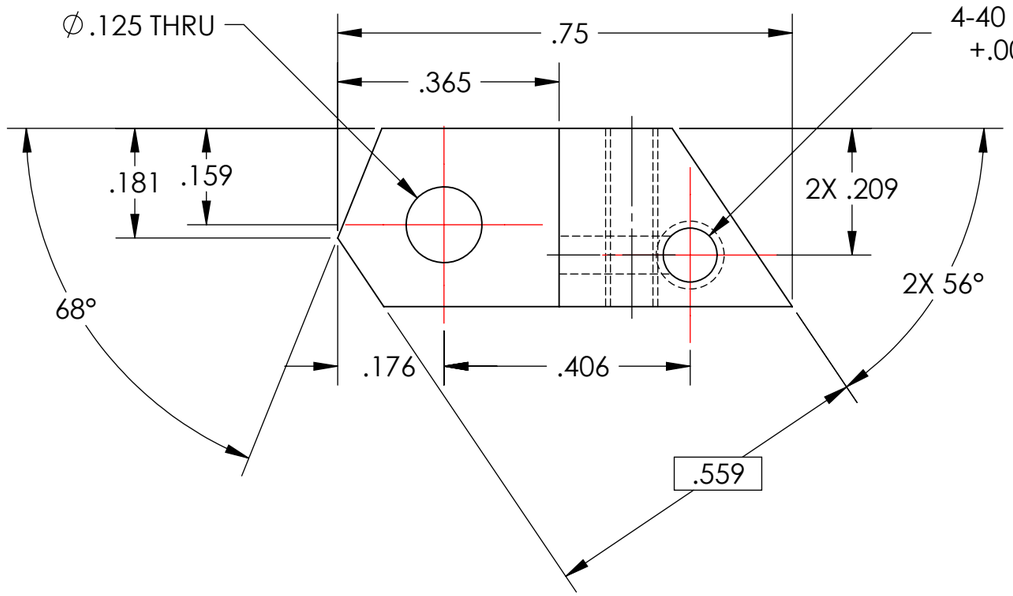
SIZE: B | DWG. NO.: D1001859 | REV.: v1
SCALE: 4:1 | PROJECTION: | SHEET 1 OF 1

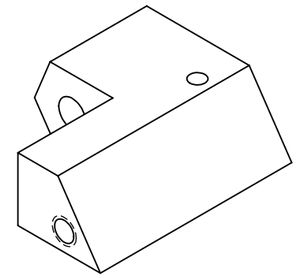
D1001859_aLIGO_AOS_D0900615_Faraday Isolator Fixed Stop RH, PART PDM REV: X-006, DRAWING PDM REV: X-007

NOTES CONTINUED:

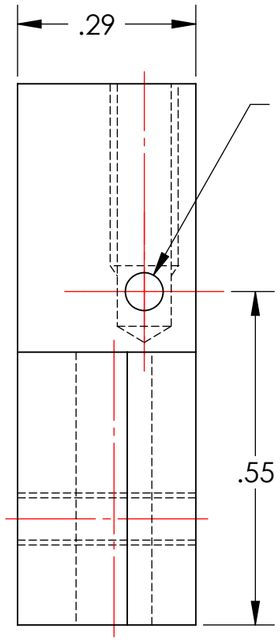
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

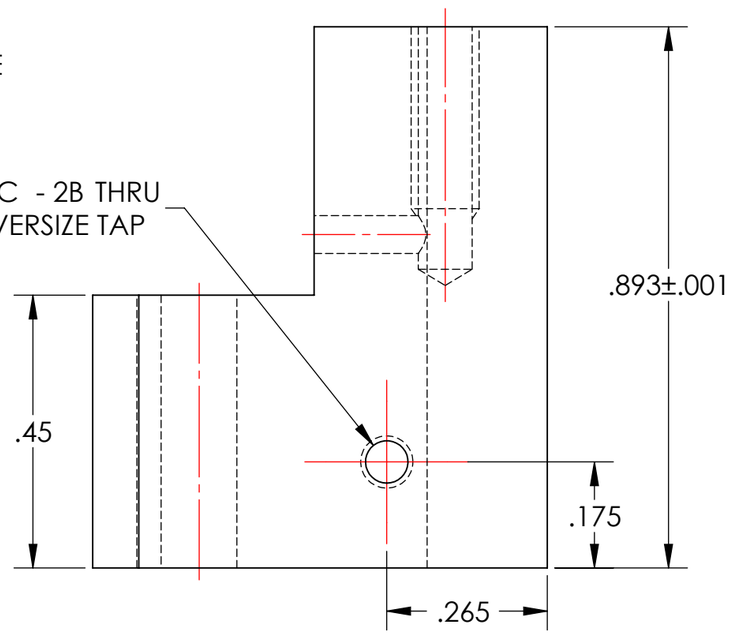
REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-





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

PART NAME SPRING BLOCK_RH

DESIGNER	TQ. NGUYEN	14 JUL 2010
DRAFTER	TQ. NGUYEN	23 AUG 2010
CHECKER	M. SMITH	
APPROVAL	D. COYNE	

SIZE B **DWG. NO.** D1001860 **REV.** v1

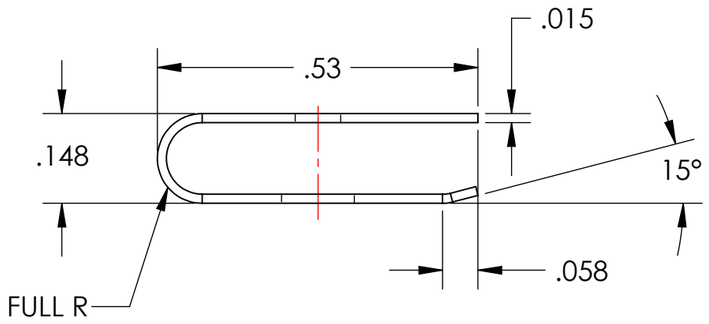
SCALE: 4:1 **PROJECTION:** **SHEET** 1 OF 1

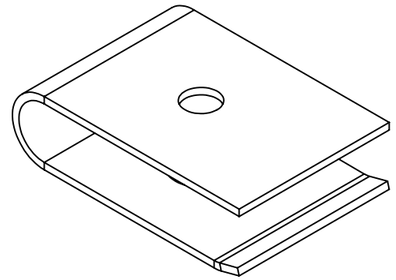
D1001860_aLIGO_AOS_D0900615_Faraday Isolator Spring Block RH, PART PDM REV: X-011, DRAWING PDM REV: X-005

NOTES CONTINUED:

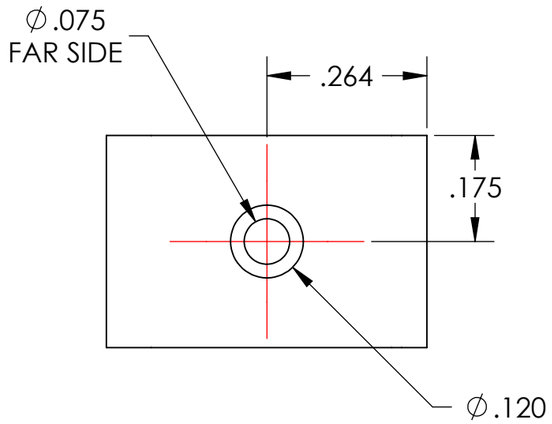
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

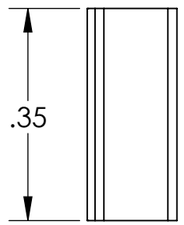
REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-

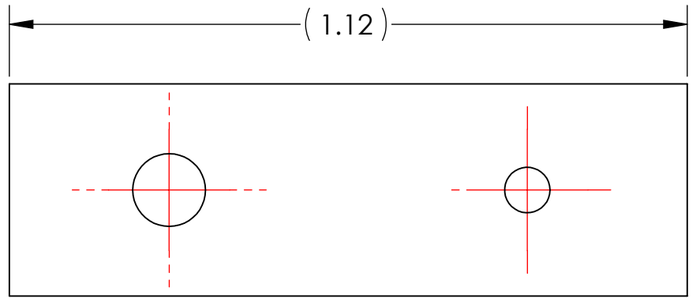




GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE







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 SSTL	FINISH: 63 µinch	LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	NEXT ASSY: D0900614_D0900615	PART NAME: U-SPRING	DESIGNER: TQ. NGUYEN 15 JUL 2010 DRAFTER: TQ. NGUYEN 23 AUG 2010 CHECKER: M. SMITH APPROVAL: D. COYNE	SIZE: B DWG. NO.: D1001861 REV.: v1 SCALE: 4:1 PROJECTION: SHEET 1 OF 1

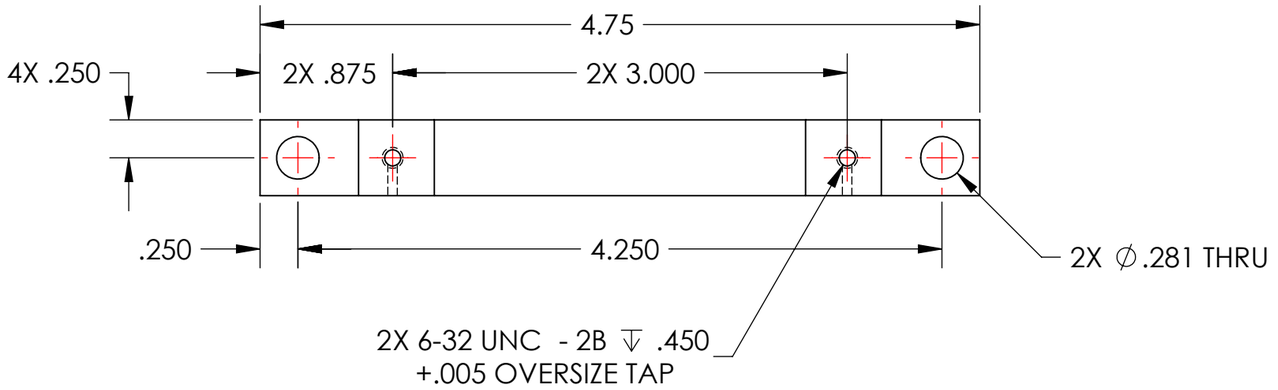
D1001861_aLIGO_AOS_D0900614_Faraday Isolator U-Spring, PART PDM REV: X-004, DRAWING PDM REV: X-003

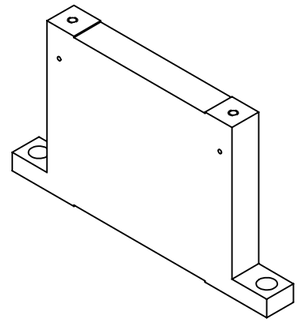
NOTES CONTINUED:

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: DXXXXXXX-VY, TYPE-XX, S/N XXX

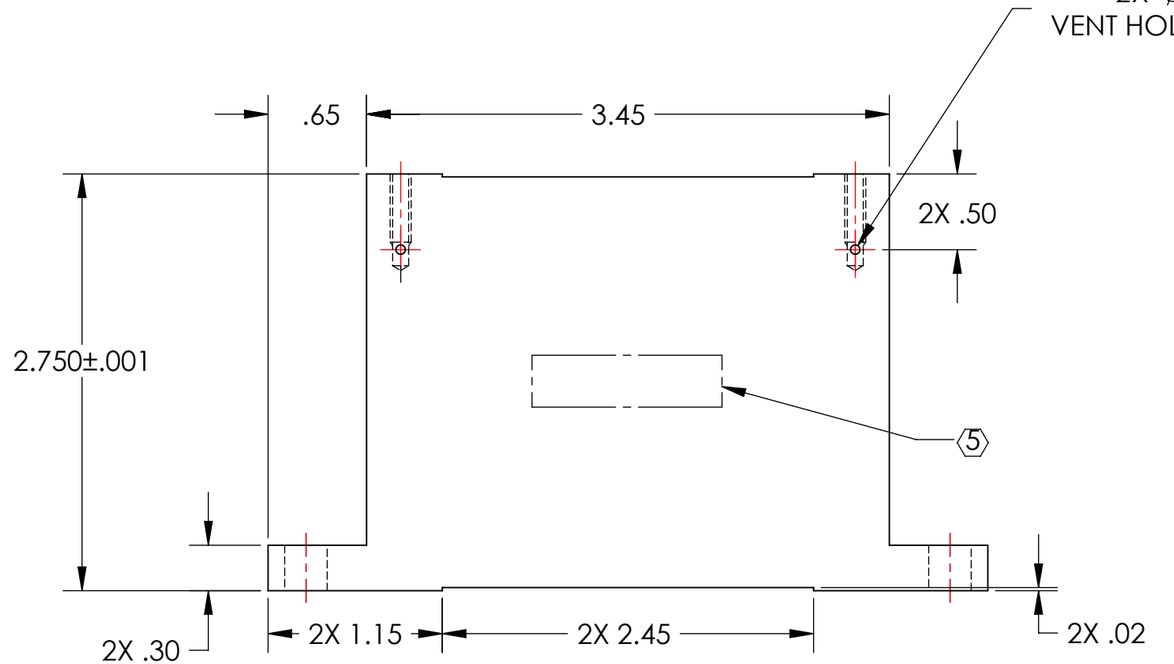
6. APPROXIMATE WEIGHT = 0.472 LB.
7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

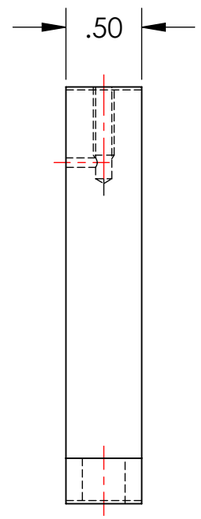
REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-





GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE





D1001862_aLIGO_AOS_D0900614_Faraday Isolator Base Mount Foot, PART PDM REV: X-009, DRAWING PDM REV: X-003

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

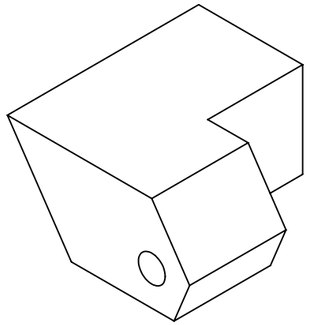
DESIGNER	TQ. NGUYEN	19 JUL 2010
DRAFTER	TQ. NGUYEN	23 AUG 2010
CHECKER	M. SMITH	
APPROVAL	D COYNE	

SIZE: B — DWG. NO.: D1001862 — REV.: v1
SCALE: 1:1 — PROJECTION: — SHEET 1 OF 1

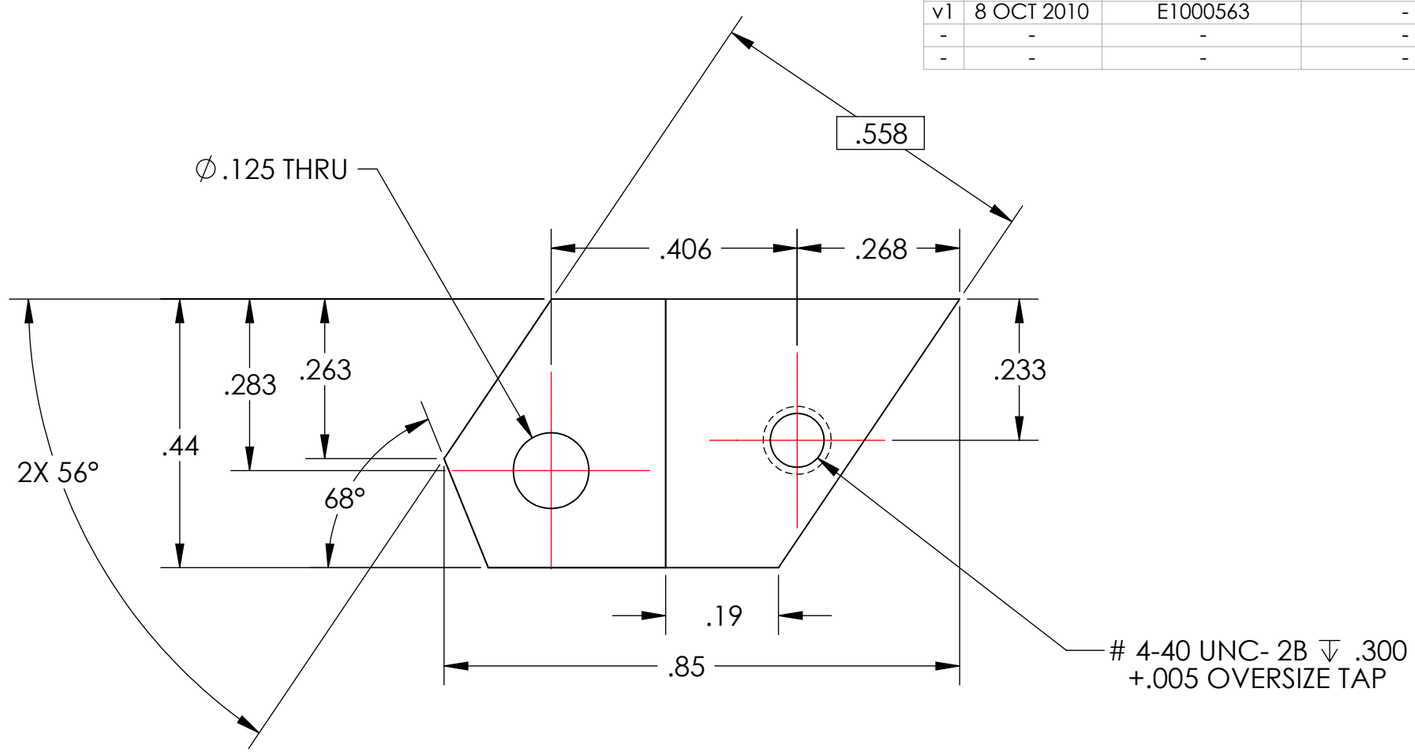
NOTES CONTINUED:

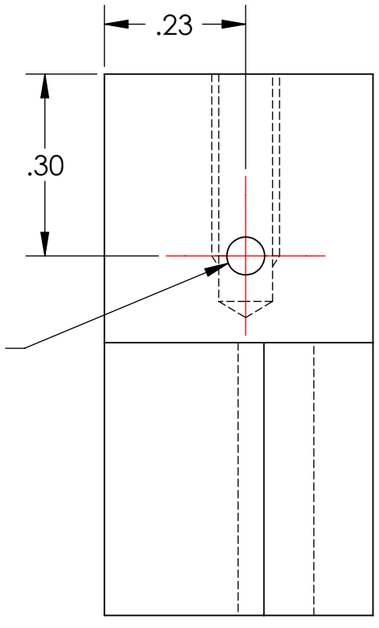
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

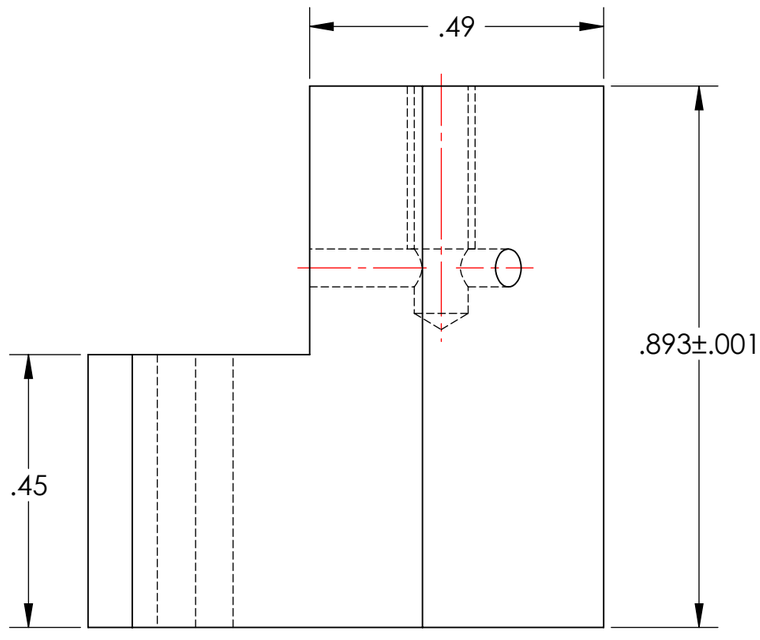
REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-



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: 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: FIXED STOP_LH

DESIGNER	TQ. NGUYEN	15 JUL 2010
DRAFTER	TQ. NGUYEN	27 AUG 2010
CHECKER	M. SMITH	
APPROVAL	D. COYNE	

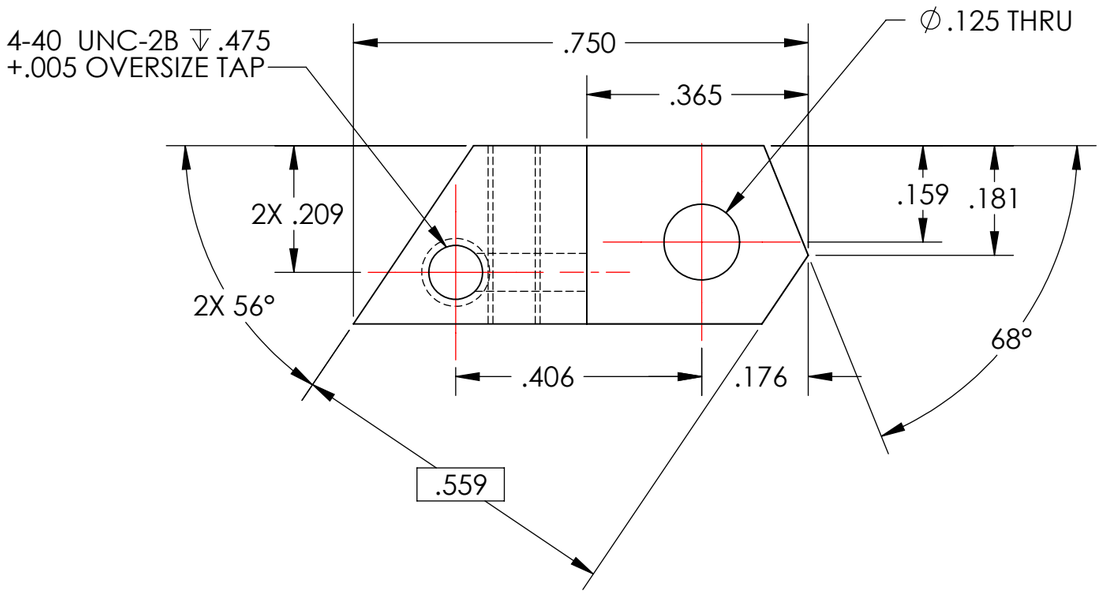
SIZE: B | DWG. NO.: D1001870 | REV.: v1
SCALE: 4:1 | PROJECTION: | SHEET 1 OF 1

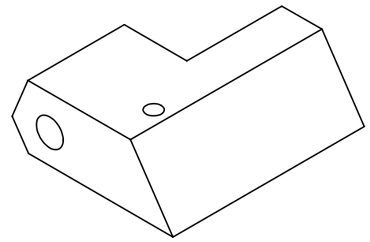
D1001870_aLIGO_AOS_D0900614_Faraday Isolator Fixed Stop LH, PART PDM REV: X-004, DRAWING PDM REV: X-005

NOTES CONTINUED:

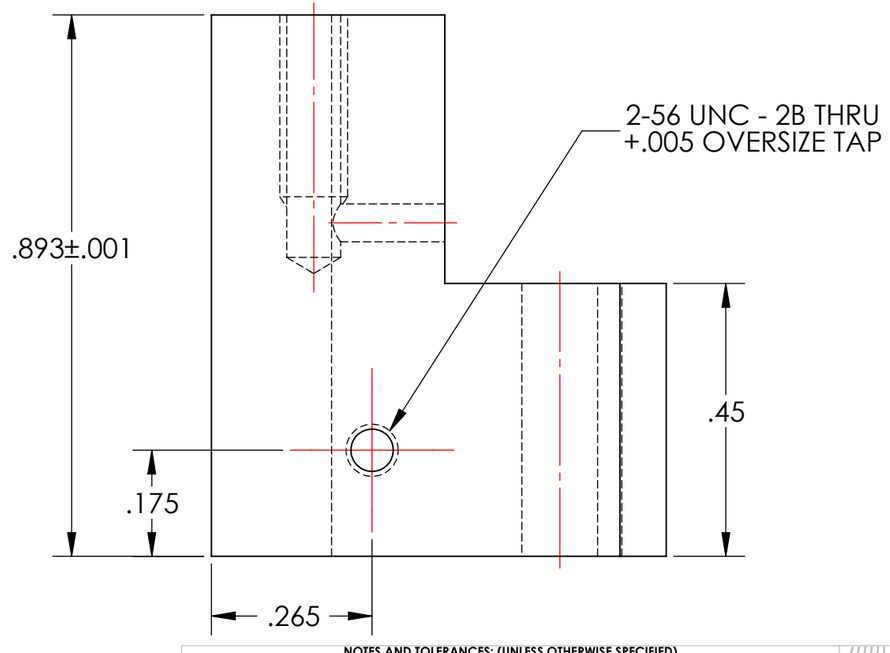
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

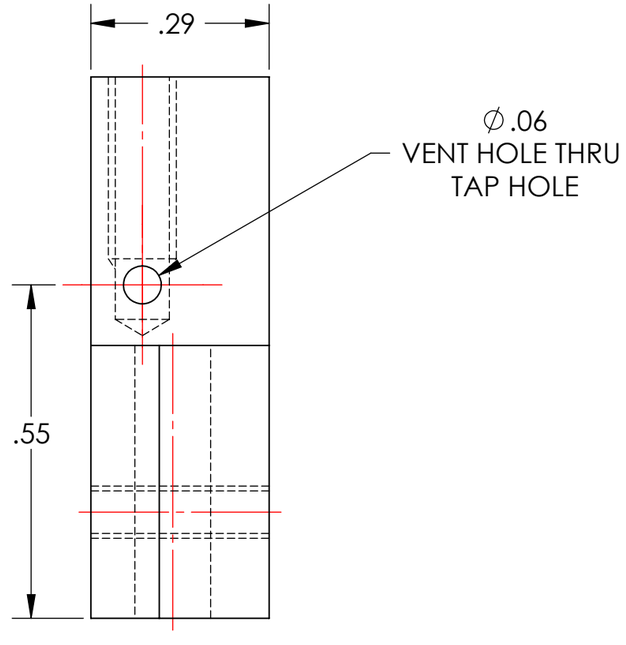
REV.	DATE	DCN #	DRAWING TREE #
v1	8 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-





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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME: SPRING BLOCK_LH	
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO / SUB-SYSTEM: AOS NEXT ASSY: D0900614	DESIGNER: TQ. NGUYEN 14 JUL 2010 DRAFTER: TQ. NGUYEN 27 AUG 2010 CHECKER: M. SMITH APPROVAL: D. COYNE	SIZE: B / DWG. NO.: D1001871 / REV.: v1 SCALE: 4:1 / PROJECTION: / SHEET 1 OF 1

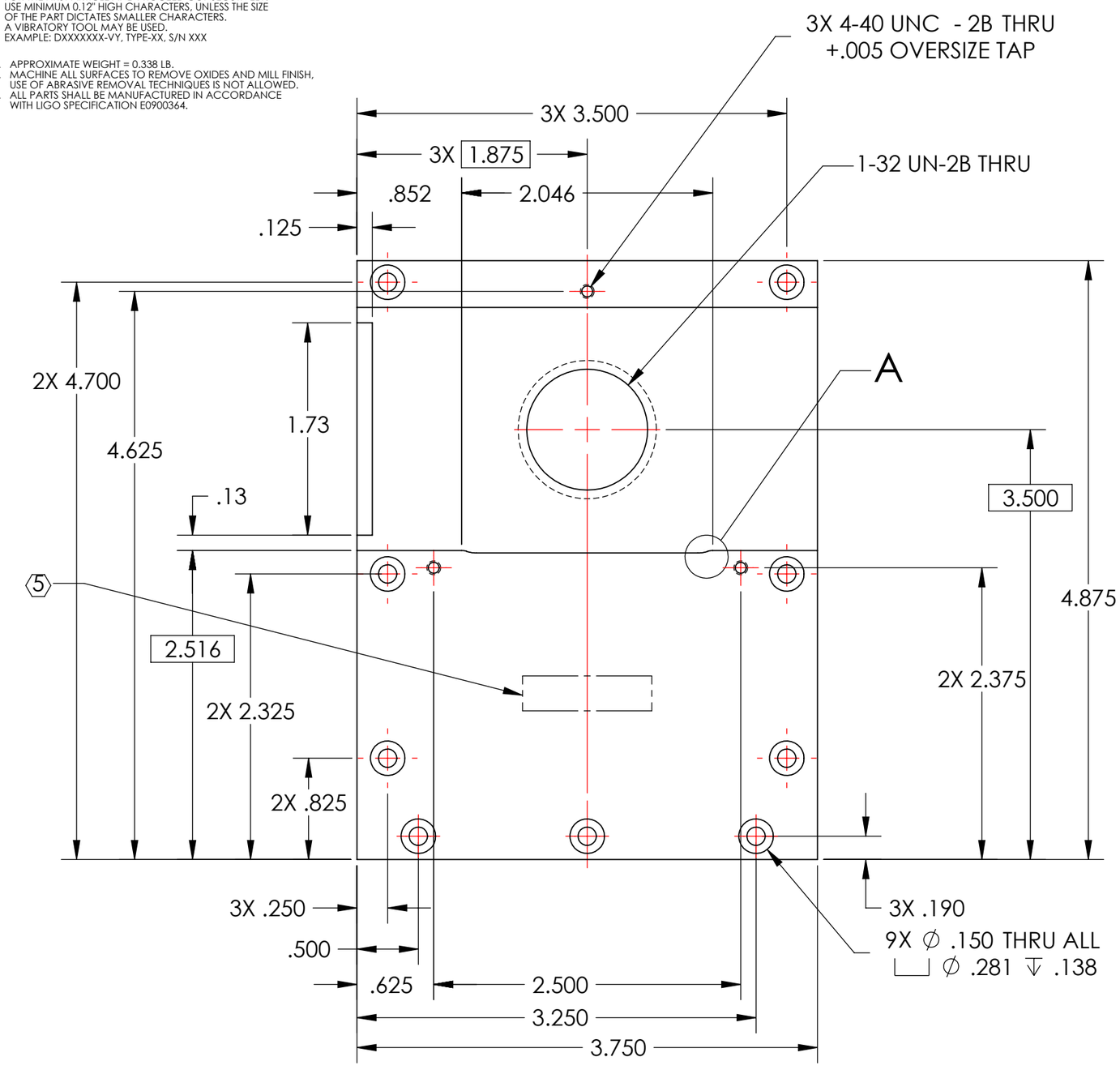
D1001871_aLIGO_AOS_D0900614_Faraday Isolator Spring Block LH, PART PDM REV: X-004, DRAWING PDM REV: X-004

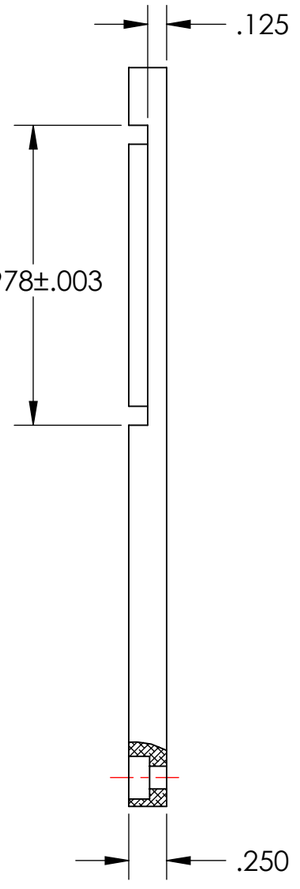
NOTES CONTINUED:

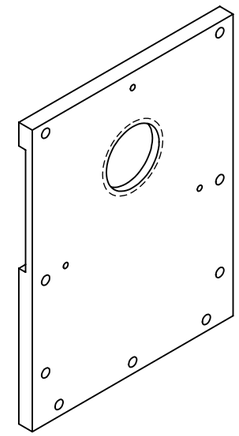
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

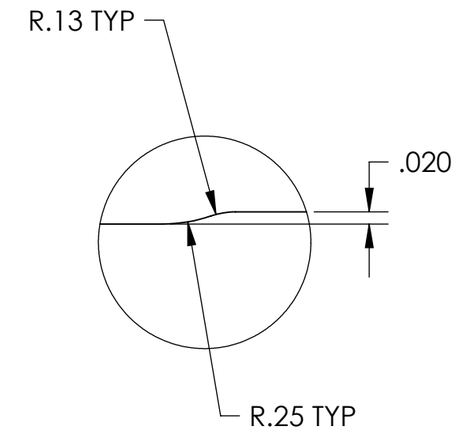
REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	-







GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE



DETAIL A
SCALE 4 : 1

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: D0900623

PART NAME: INPUT BAFFLE HOLDER

DESIGNER	TQ. NGUYEN	26 JUL 2010
DRAFTER	TQ. NGUYEN	23 AUG 2010
CHECKER	M. SMITH	
APPROVAL	D. COYNE	

SIZE: B — DWG. NO.: D1001915 — REV.: v1
SCALE: 1:1 — PROJECTION: — SHEET 1 OF 1

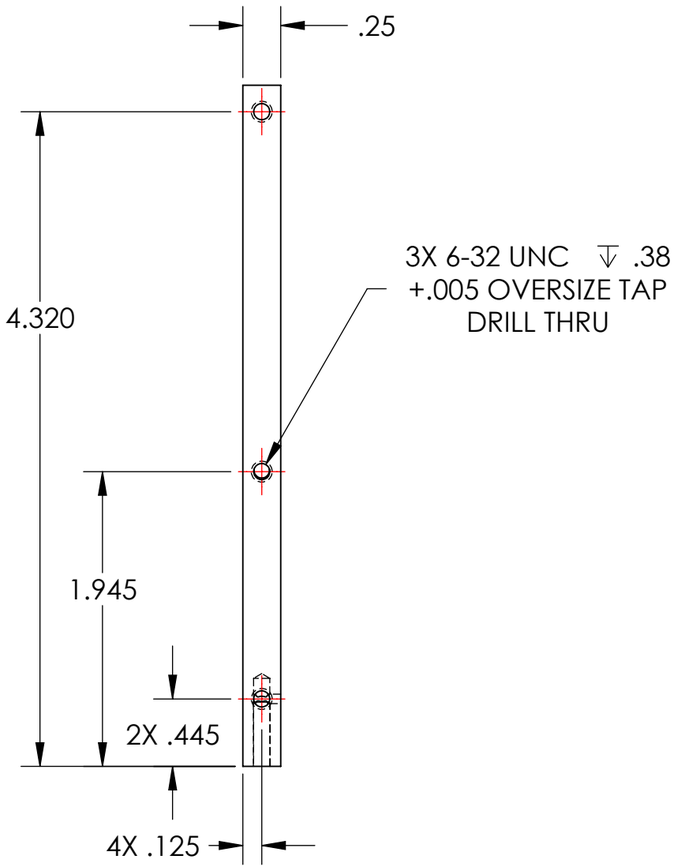
D1001915_aLIGO_AOS_Wedge Window Panel_INPUT BAFFLE, PART PDM REV: X-014, DRAWING PDM REV: X-007

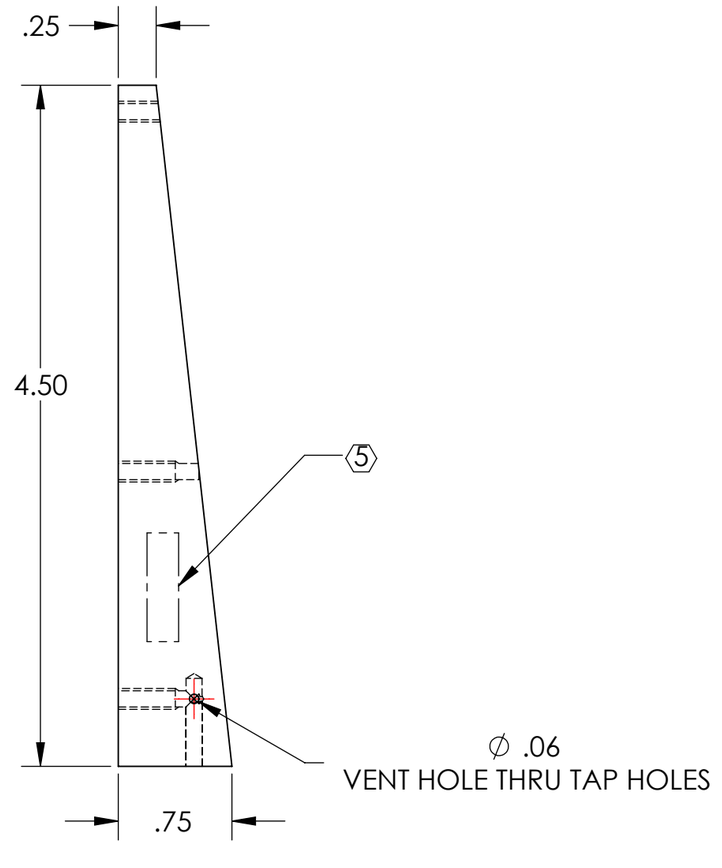
NOTES CONTINUED:

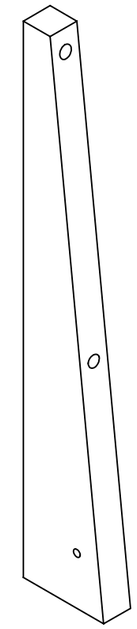
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

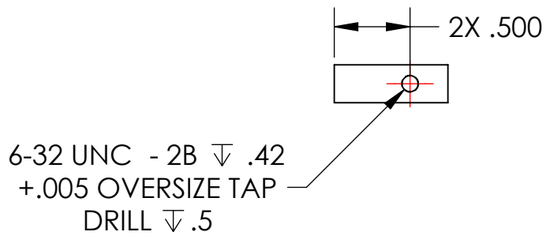
REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-







GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE



D1001916_aLIGO_AOS_Wedge Window Side Support, PART PDM REV: X-007, DRAWING PDM REV: X-007

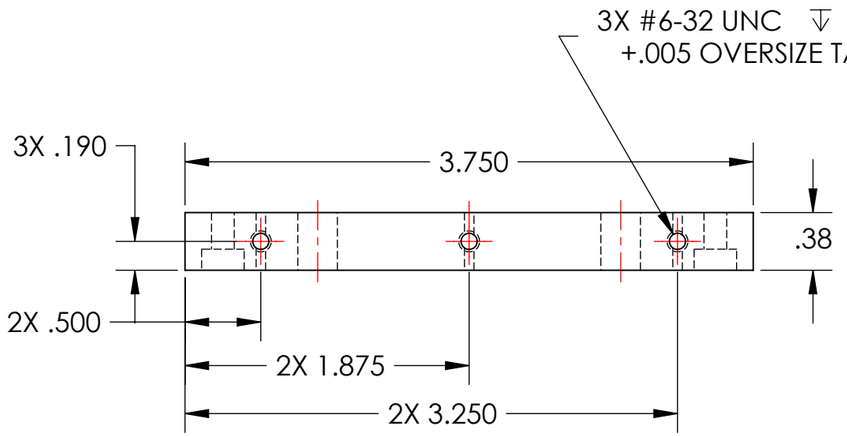
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)									
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 0.5°	1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: INPUT BAFFLE SIDE SUPPORT				
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER: TQ. NGUYEN 27 JUL 2010	SIZE: B	DWG. NO.: D1001916	REV.: v1	
			NEXT ASSY: D1001918		DRAFTER: TQ. NGUYEN 24 AUG 2010				
					CHECKER: M. SMITH				
					APPROVAL: D. COYNE	SCALE: 1:1	PROJECTION:	SHEET 1 OF 1	

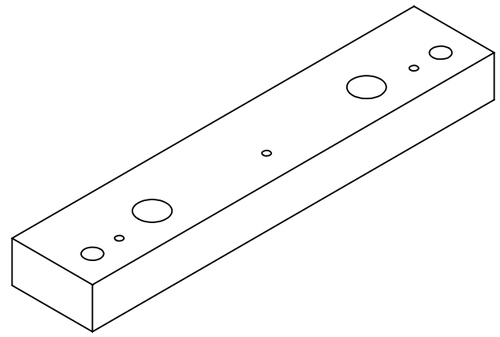
REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-

NOTES CONTINUED:

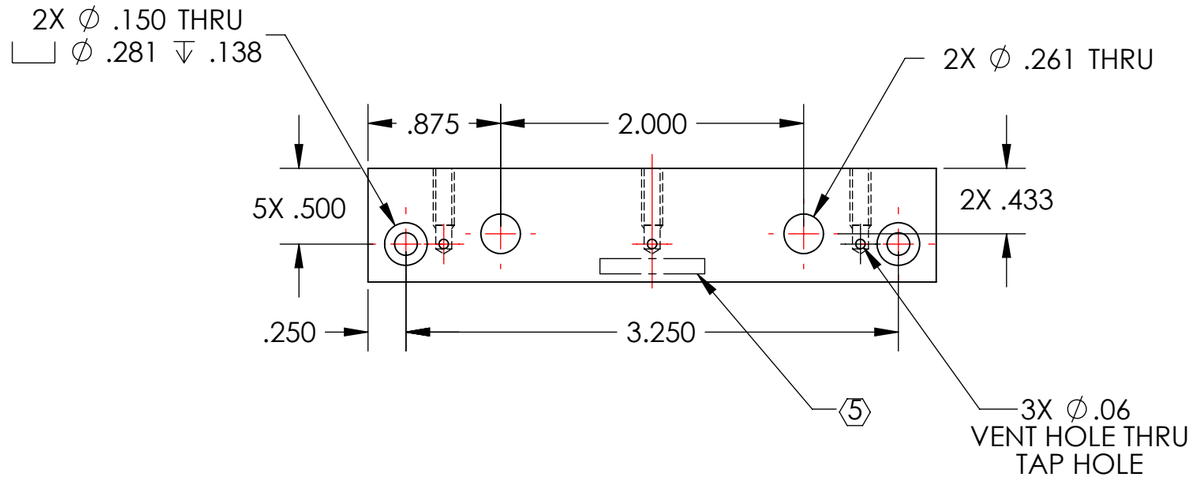
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

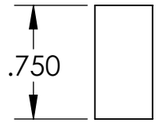
6. APPROXIMATE WEIGHT = 0.096 LB.
7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.





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	FINISH
6061-T6 Al	63 µinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM	SUB-SYSTEM	NEXT ASSY
ADVANCED LIGO	AOS	D1001918

PART NAME: INPUT BAFFLE BASE

DESIGNER	TQ. NGUYEN	27 JUL 2010
DRAFTER	TQ. NGUYEN	24 AUG 2010
CHECKER	M. SMITH	
APPROVAL	D. COYNE	

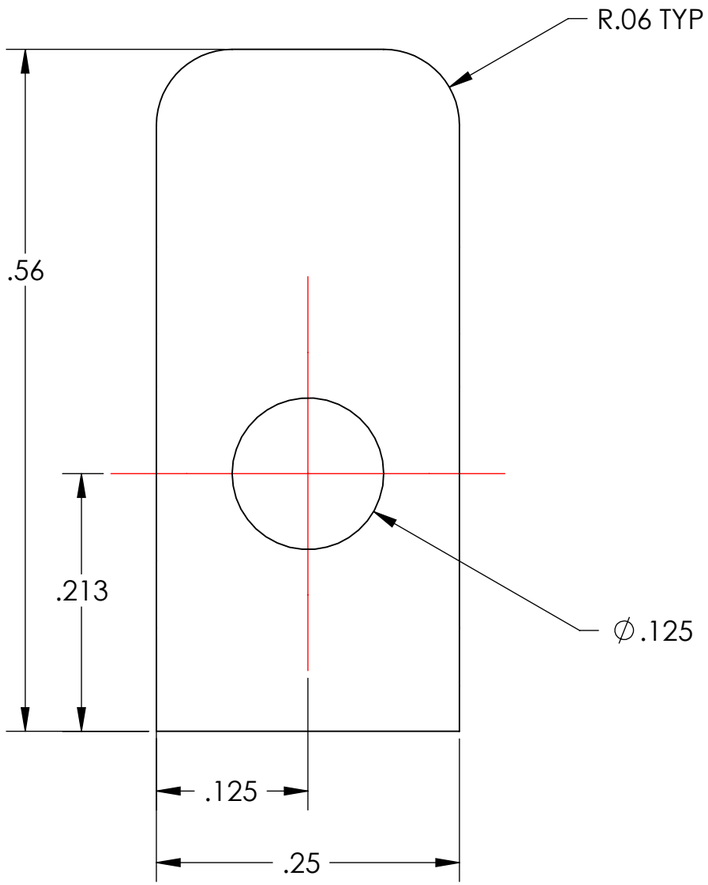
SIZE: B | DWG. NO.: D1001917 | REV.: v1 | SCALE: 1:1 | PROJECTION: | SHEET 1 OF 1

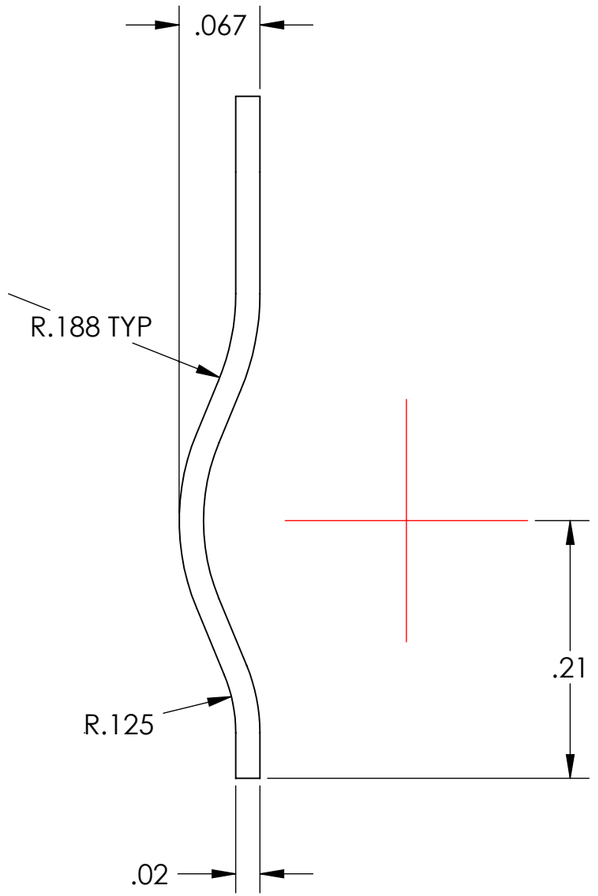
D1001917_aLIGO_Wedge window Flatform, PART PDM REV: X-007, DRAWING PDM REV: X-008

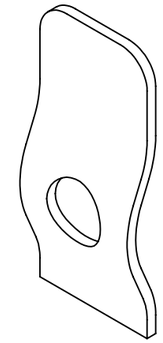
NOTES CONTINUED:

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): DXXXXXXX-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
-	-	-	-
-	-	-	-







GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE

D1001919_aLIGO_AOS_DOG CLAMP Wedge Window_Input Baffle, PART PDM REV: X-009, DRAWING PDM REV: X-003

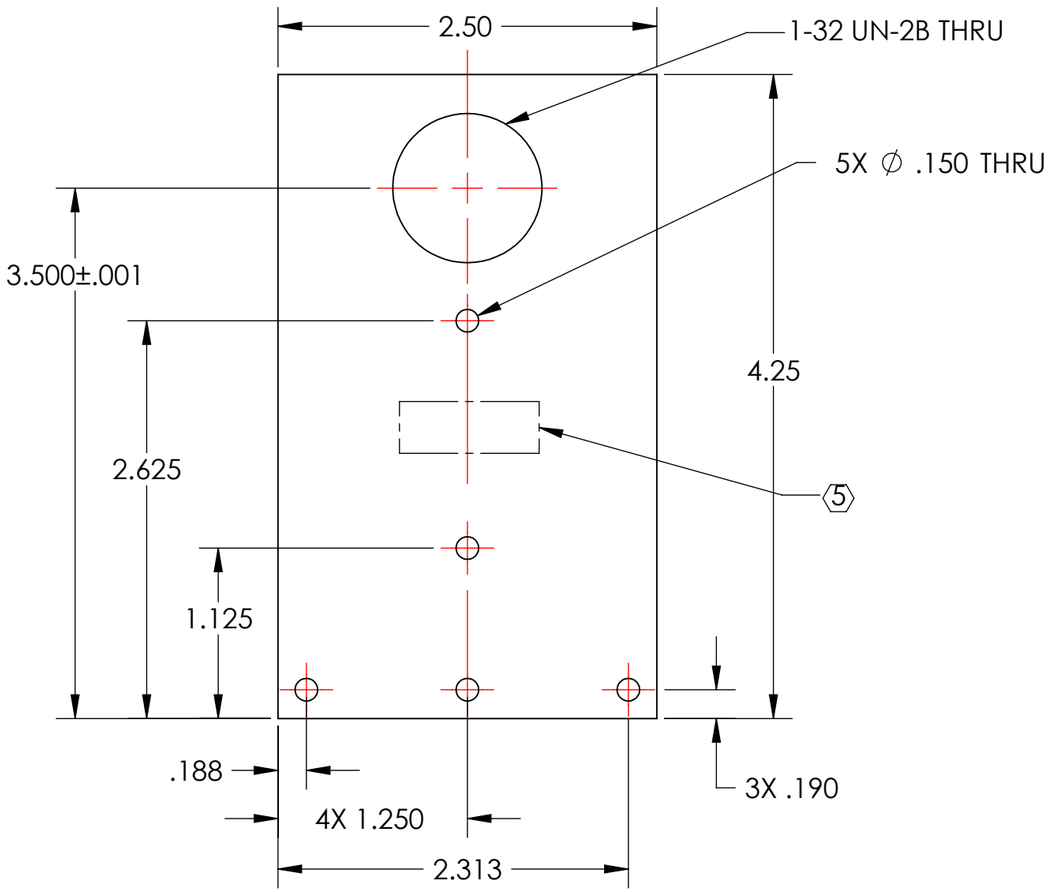
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)									
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 0.5°	1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: BEAM DUMP MOUNTING CLAMP				
	MATERIAL: 304 SSTL	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER: TQ. NGUYEN 2 AUG 2010	SIZE: B	DWG. NO.: D1001919	REV.: v1
			NEXT ASSY: D1001918		DRAFTER: TQ. NGUYEN 24 AUG 2010			
					CHECKER: M. SMITH			
					APPROVAL: D. COYNE	SCALE: 8:1	PROJECTION:	SHEET 1 OF 1

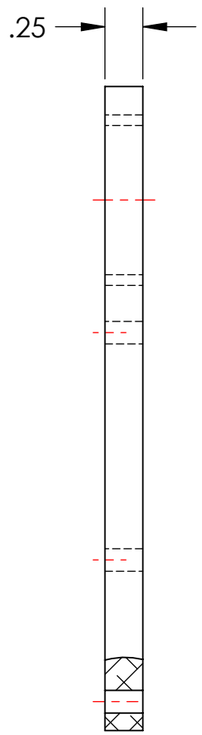
NOTES CONTINUED:

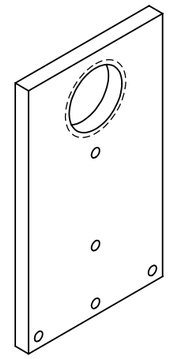
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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







GENERAL VIEW
FOR REFERENCE ONLY
NO SCALE

D1001959_aLIGO_AOS_Wedge Window Panel_OUTPUT BAFFLE, PART PDM REV: X-013, DRAWING PDM REV: X-009

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 D1001963

PART NAME RETICLE HOLDER

DESIGNER	TQ. NGUYEN	26 JUL 2010
DRAFTER	TQ. NGUYEN	25 AUG 2010
CHECKER	M. SMITH	
APPROVAL	D. COYNE	

SIZE B **DWG. NO.** D1001959 **REV.** v1

SCALE: 1:1 **PROJECTION:** SHEET 1 OF 1

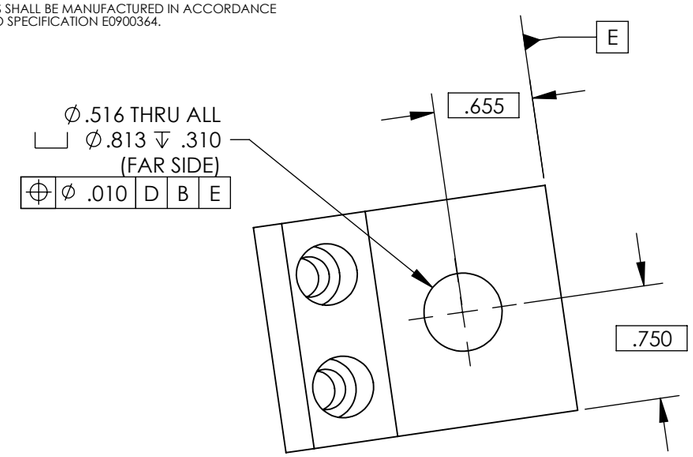
NOTES CONTINUED:

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: DXXXXXXX-VY, TYPE-XX, S/N XXX

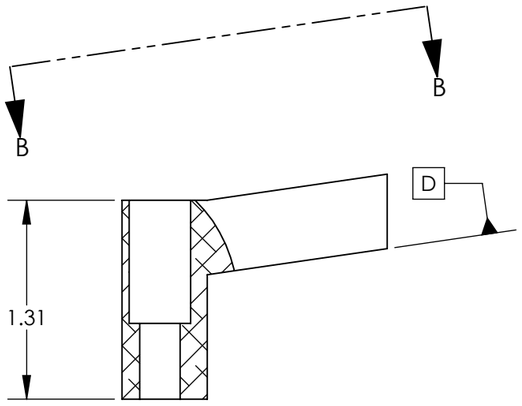
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

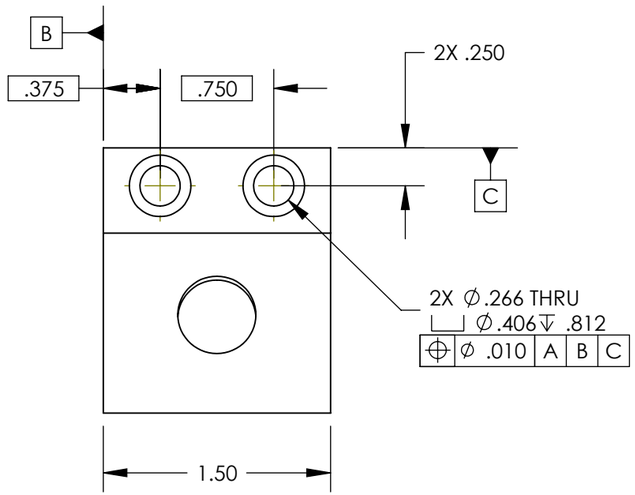
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

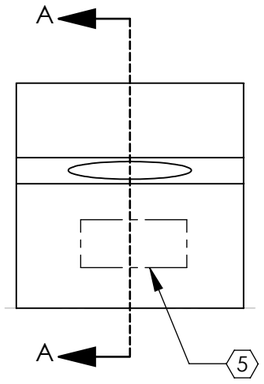
REV.	DATE	DCN #	DRAWING TREE #
v1	08 OCT 2010	E1000563	

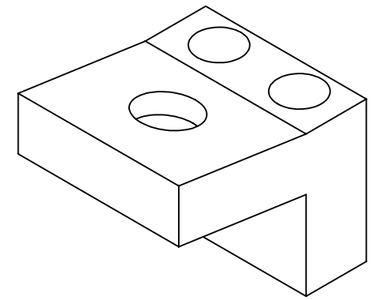


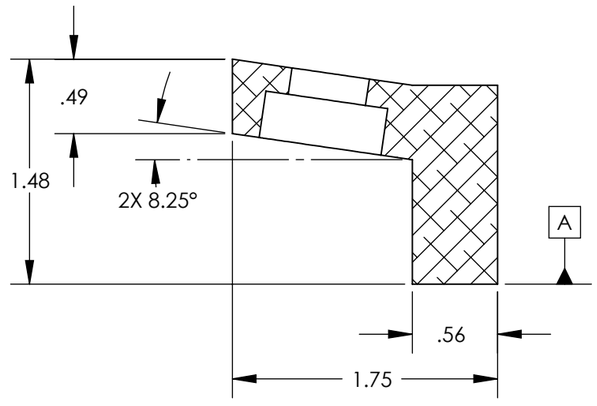
VIEW B-B











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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME: WIRE SUPPORT BLOCK	
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM / SUB-SYSTEM	DESIGNER / DRAFTER (MRUIZ 22 AUG 2010) / CHECKER / APPROVAL	SIZE: B · DWG. NO.: D1001960 · REV.: v1
			NEXT ASSY: D1001958	SCALE: 1:1 · PROJECTION:	SHEET 1 OF 1

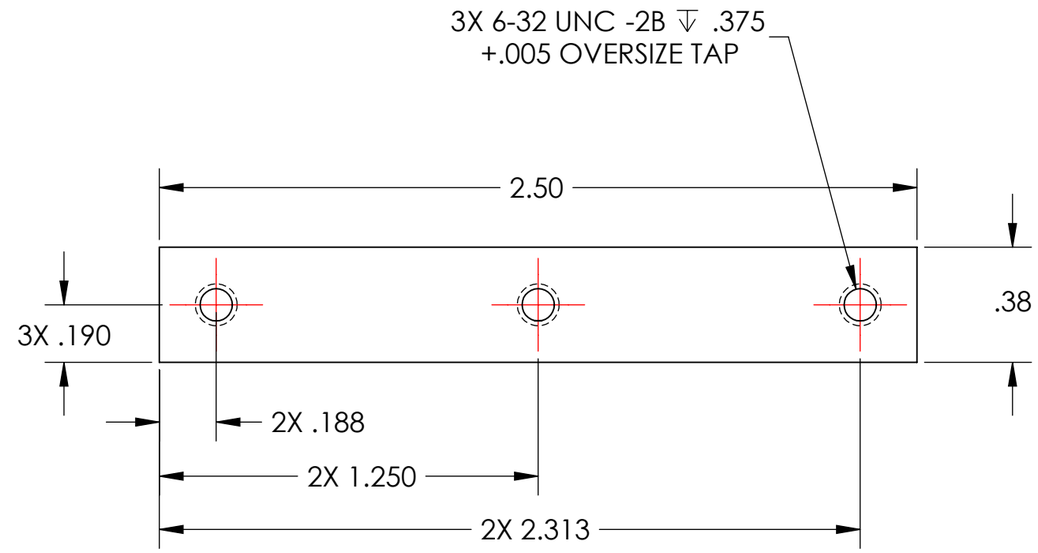
D1001960_aLIGO_AOS_D0901958_Wire Support Block, PART PDM REV: X-008, DRAWING PDM REV: X-008

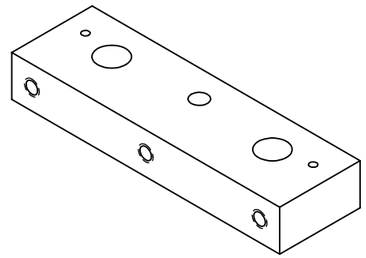
NOTES CONTINUED:

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: DXXXXXXX-VY, TYPE-XX, S/N XXX

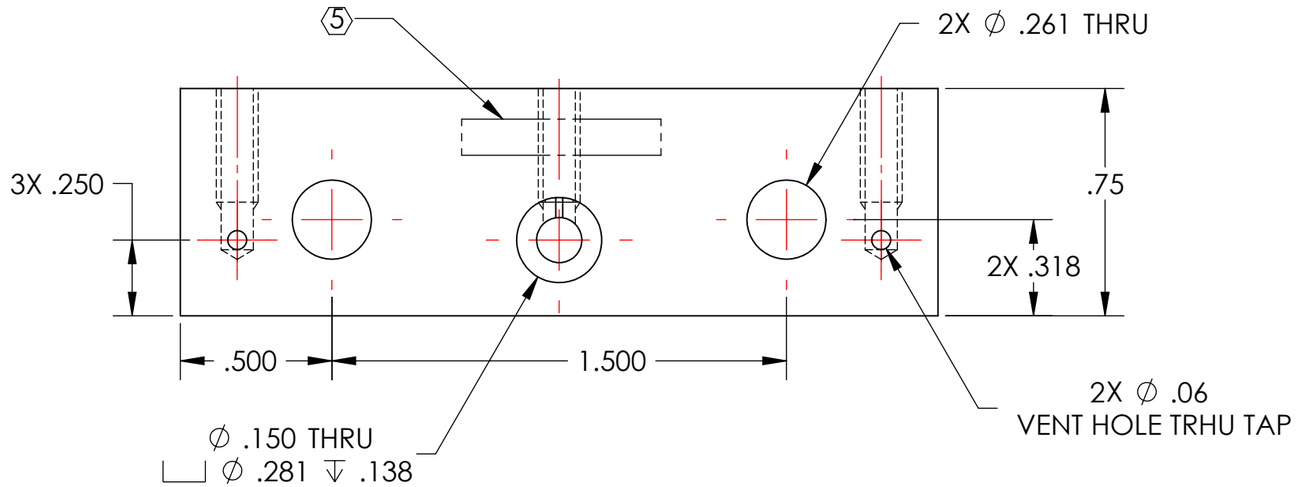
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

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





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.		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: OUTPUT ALIGNMENT FIXTURE BASE					
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER: TQ. NGUYEN	27 JUL 2010	SIZE: B	DWG. NO.: D1001961	REV.: v1
			NEXT ASSY: D1001963		DRAFTER: TQ. NGUYEN	25 AUGF 2010			
					CHECKER: M. SMITH		SCALE: 2:1	PROJECTION:	SHEET 1 OF 1
					APPROVAL: D. COYNE				

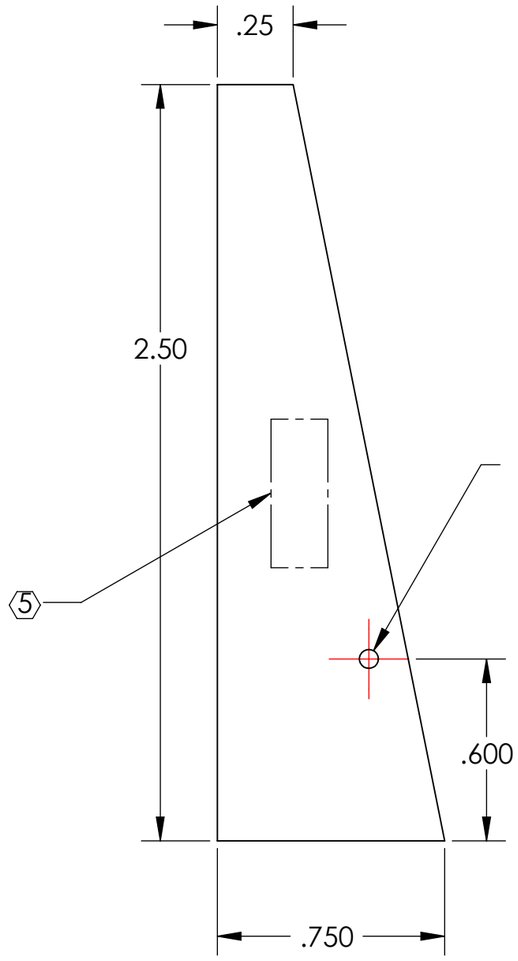
D1001961_aLIGO_Wedge WindowPlatform_OUTPUT BAFFLE, PART PDM REV: X-007, DRAWING PDM REV: X-008

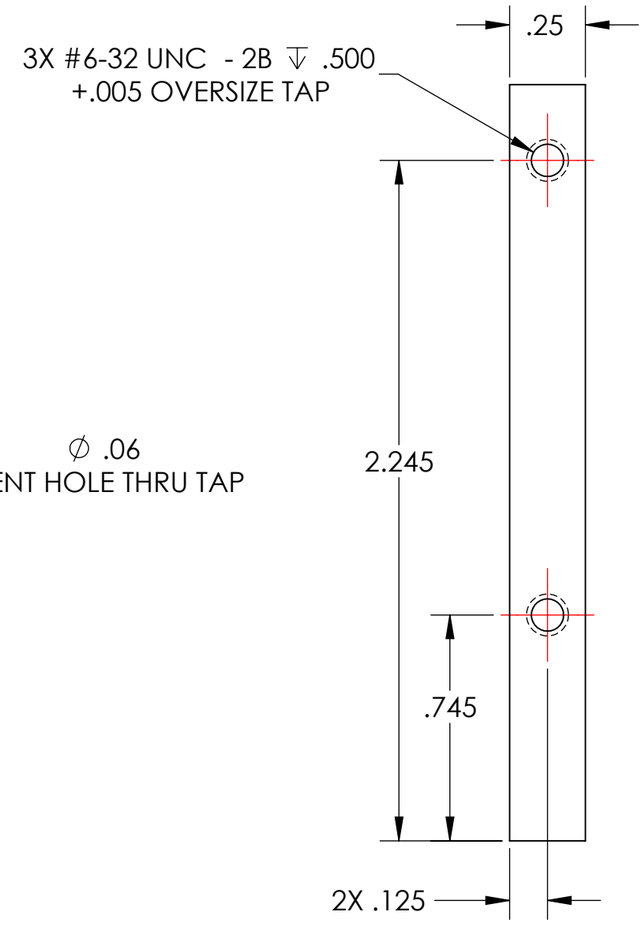
NOTES CONTINUED:

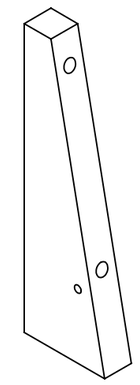
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

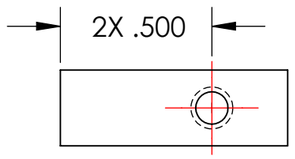
REV.	DATE	DCN #	DRAWING TREE #
v1	7 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-







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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: OUTPUT ALIGNMENT FIXTURE SUPPORT				
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER: TQ. NGUYEN 27 JUL 2010	SIZE: B	DWG. NO.: D1001962	REV.: v1	
			NEXT ASSY: D1001963		DRAFTER: TQ. NGUYEN 25 AUG 2010				
					CHECKER: M. SMITH				
					APPROVAL: D. COYNE	SCALE: 2:1	PROJECTION:	SHEET 1 OF 1	

D1001962_aLIGO_AOS_Wedge Window Middle Support_OUTPUT BAFFLE, PART PDM REV: X-007, DRAWING PDM REV: X-009

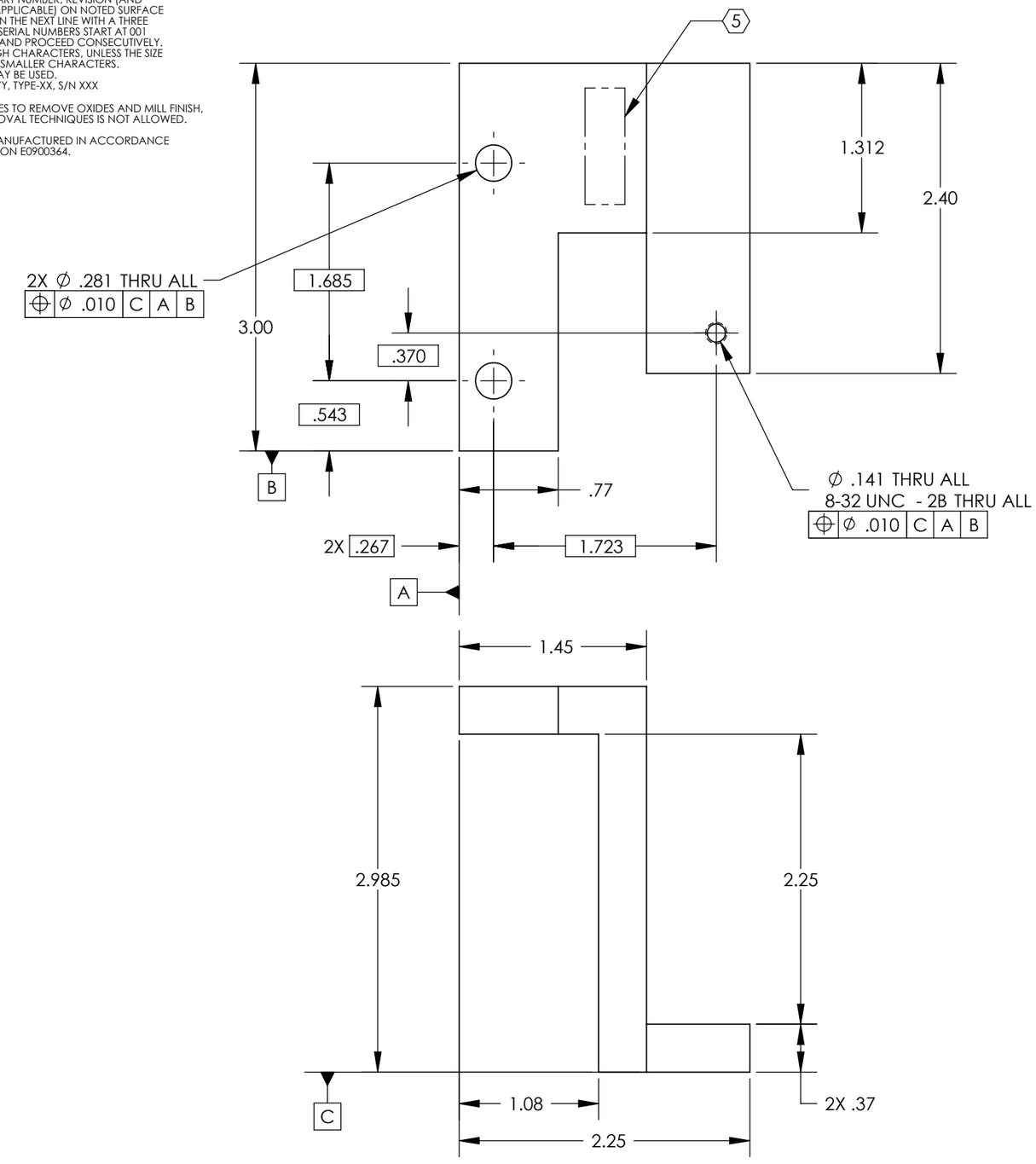
NOTES CONTINUED:

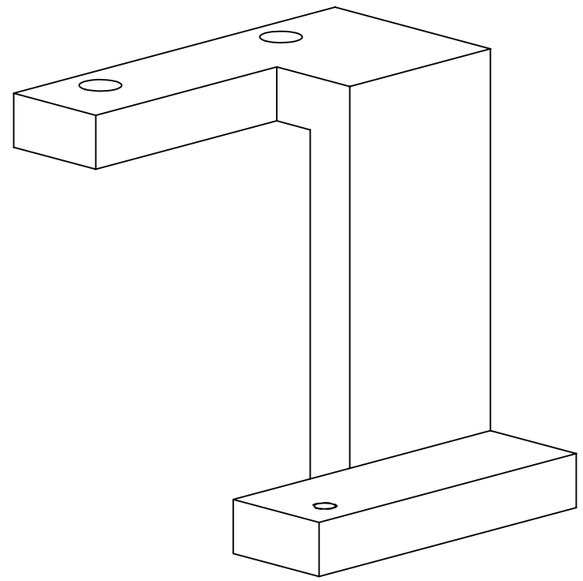
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: DXXXXXXX-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)							
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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	MAGNETIC PLATE MOUNTING BACK (LOWER) BRACKET	
	MATERIAL: 6061-T6 Al	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER		
			NEXT ASSY: D0900048		DRAFTER: MRUIZ 16 AUG 2010	SIZE: B	DWG. NO.: D1002112 REV.: v1
					CHECKER		
					APPROVAL	SCALE: 1:1	PROJECTION: SHEET 1 OF 1

D1002112_Magnetic Plate Mounting Back (Lowered) Bracket, PART PDM REV: X-006, DRAWING PDM REV: X-009

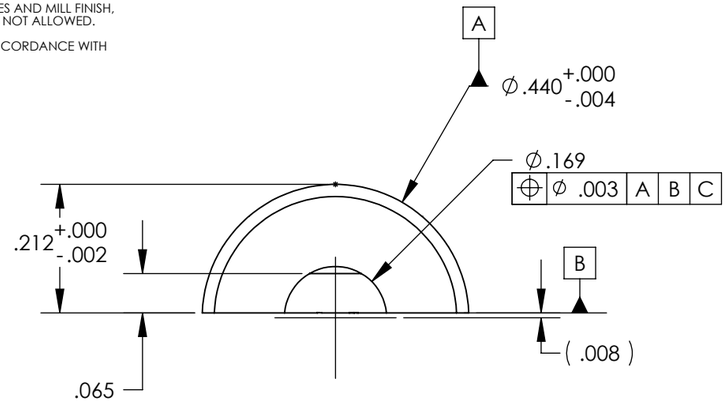
NOTES CONTINUED:

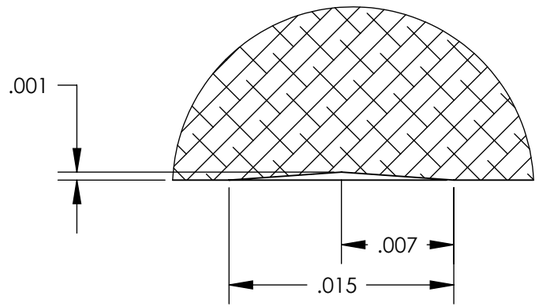
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

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

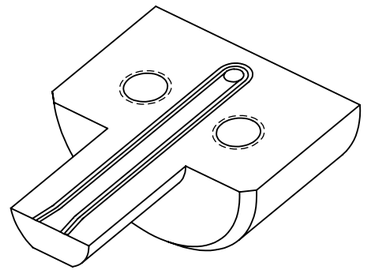
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

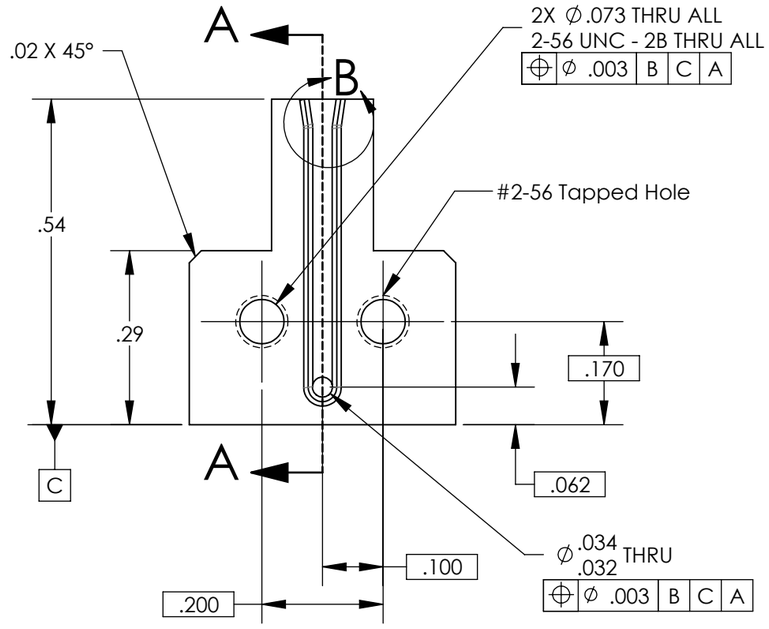
REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	

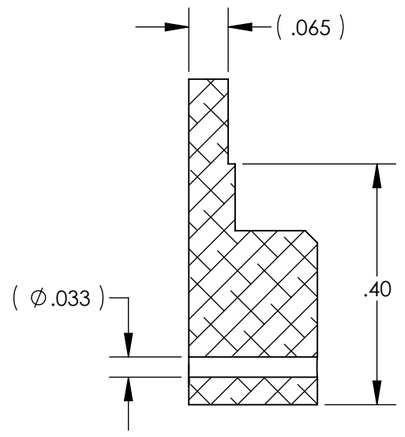




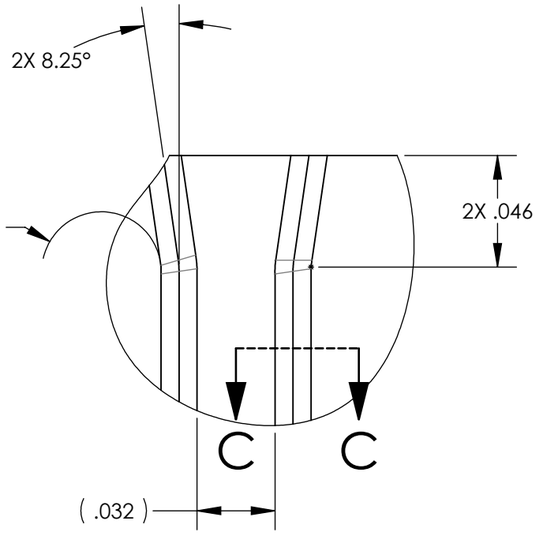
DETAIL C
SCALE 100 : 1







SECTION A-A



DETAIL B
SCALE 16 : 1

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

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.

MATERIAL: 304, 316 OR 302 SSTL
FINISH: 63 µinch

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO
SUB-SYSTEM: AOS
NEXT ASSY: D0900586

PART NAME: MUSIC WIRE SPLIT CLAMP 3

DESIGNER		
DRAFTER	M.RUIZ	24 SEP 2010
CHECKER		
APPROVAL		

SIZE: B — DWG. NO.: D1002168 — REV.: v1
SCALE: 4:1 — PROJECTION: — SHEET 1 OF 1

D1002168_AdLIGO_AOS_D0900586_Music Wire Split Clamp 3, PART PDM REV: X-008, DRAWING PDM REV: X-007

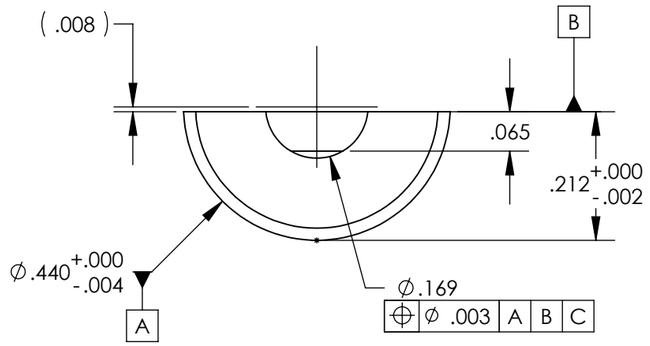
NOTES CONTINUED:

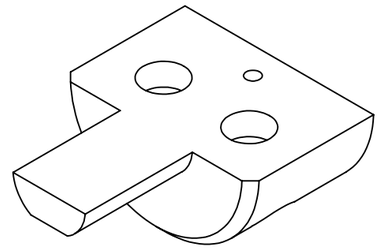
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND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

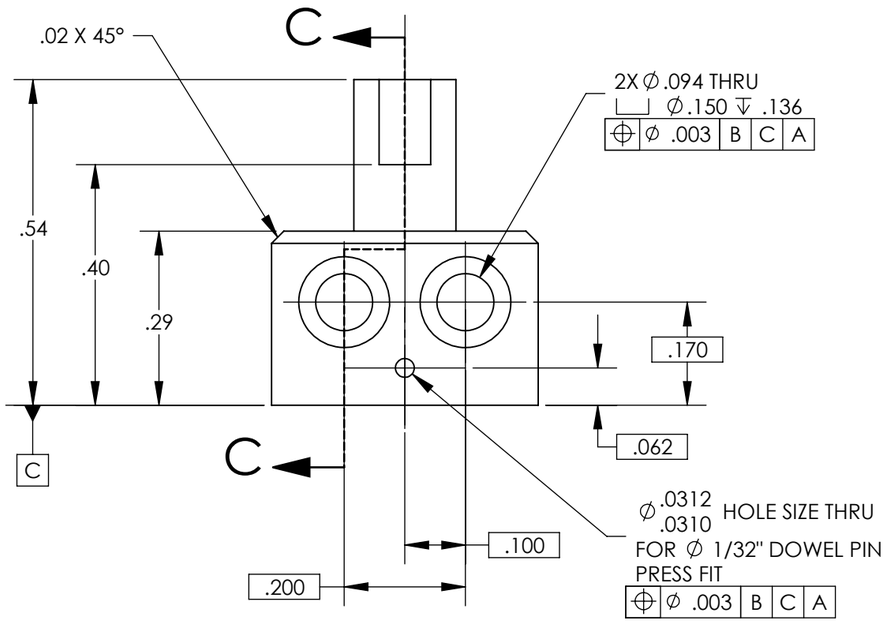
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

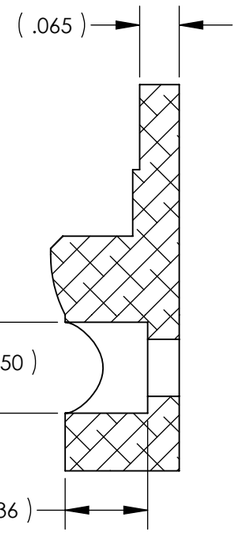
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

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

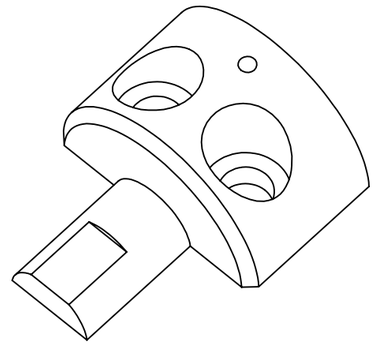








SECTION C-C



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

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.

MATERIAL 304, 316 OR 302 SSTL

FINISH 63 µinch

NEXT ASSY D0900586

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PART NAME MUSIC WIRE SPLIT CLAMP 4

SYSTEM ADVANCED LIGO **SUB-SYSTEM** AOS

DESIGNER		
DRAFTER	M.RUIZ	24 SEP 2010
CHECKER		
APPROVAL		

SIZE B **DWG. NO.** D1002169 **REV.** v1

SCALE: 4:1 PROJECTION: SHEET 1 OF 1

D1002169_AdLIGO_AOS_D0900586_Music Wire Split Clamp 4, PART PDM REV: X-002, DRAWING PDM REV: X-007

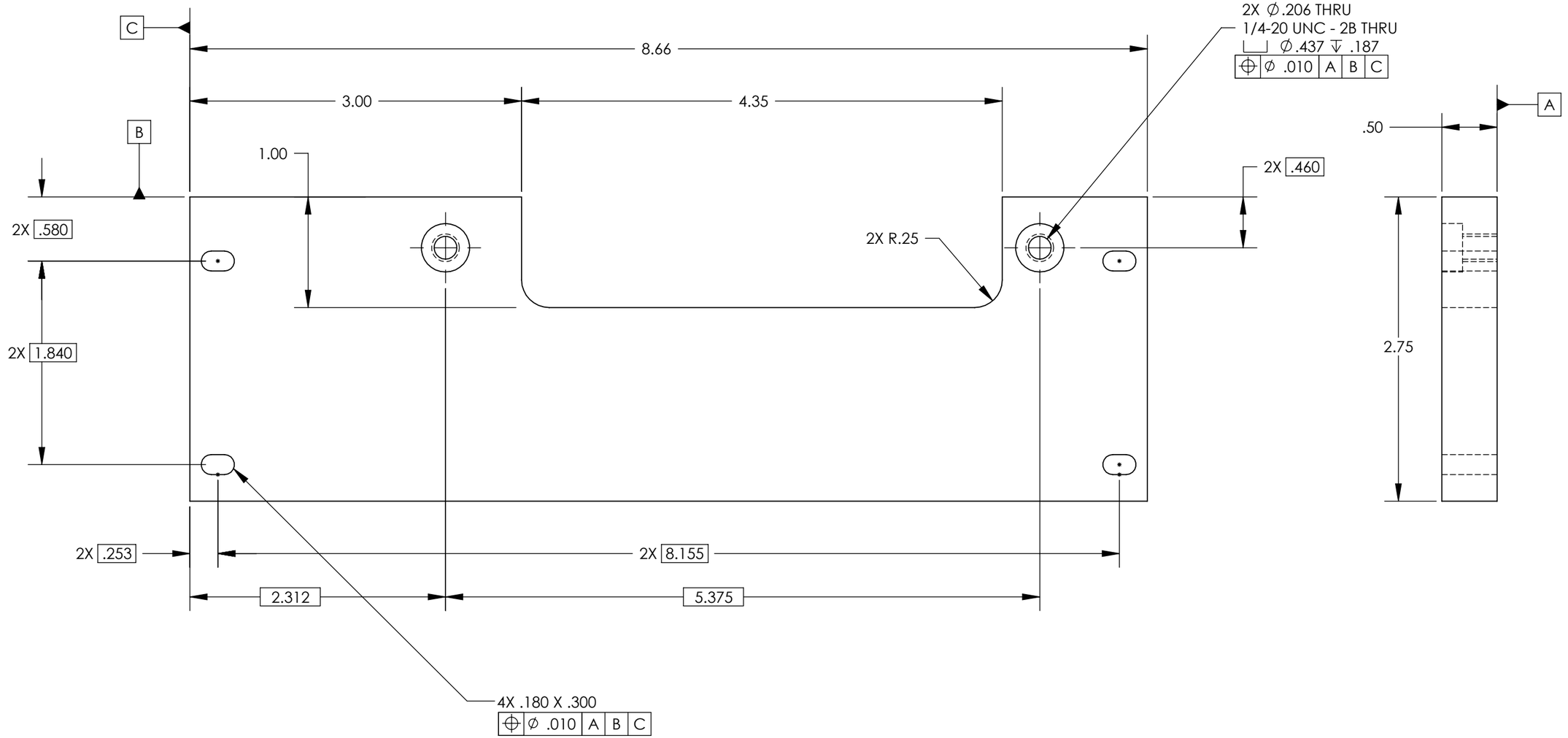
NOTES CONTINUED:

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: DXXXXXXX-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	



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: 6061-T6 Al
FINISH: 63 µinch

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM: ADVANCED LIGO
SUB-SYSTEM: AOS
NEXT ASSY: D1002256

PART NAME: CROSSBAR PLATE_IN

DESIGNER		
DRAFTER	MRUIZ	08/25/2010
CHECKER		
APPROVAL		

SIZE: B | DWG. NO.: D1002257 | REV.: v1

SCALE: 1:1 | PROJECTION: | SHEET 1 OF 1

D1002257_ALIGO_AOS_D100256_Crossbar Plate_In, PART PDM REV: X-005, DRAWING PDM REV: X-009

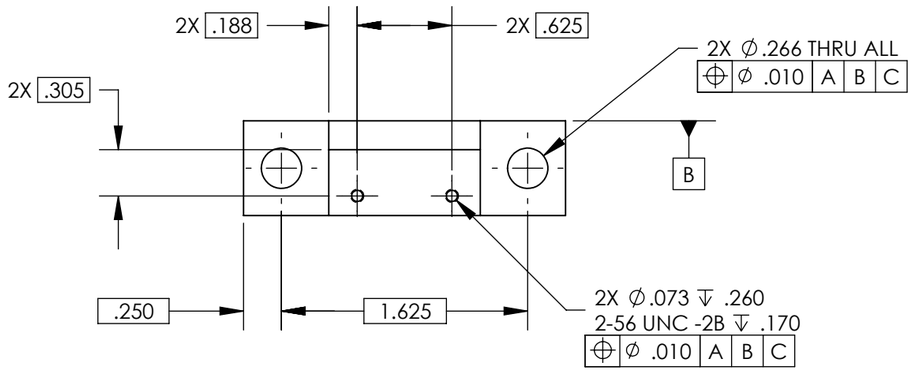
REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	

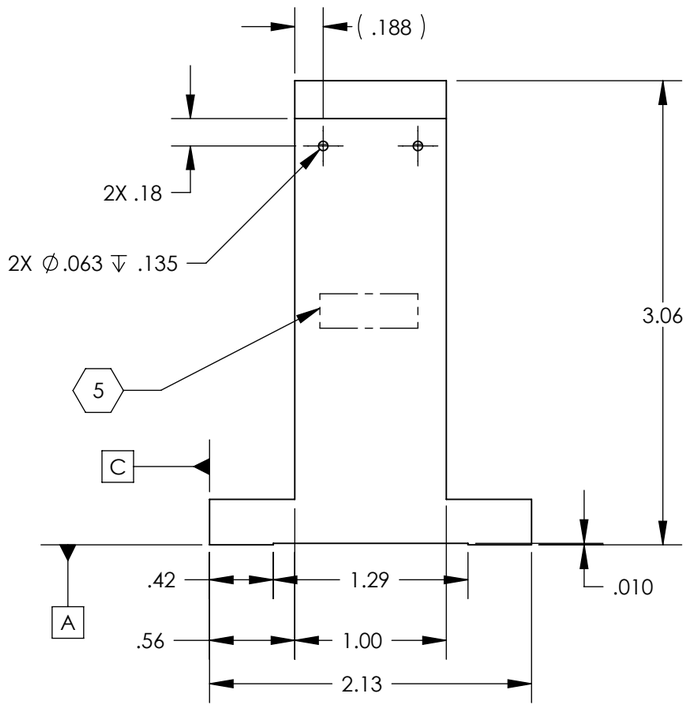
NOTES CONTINUED:

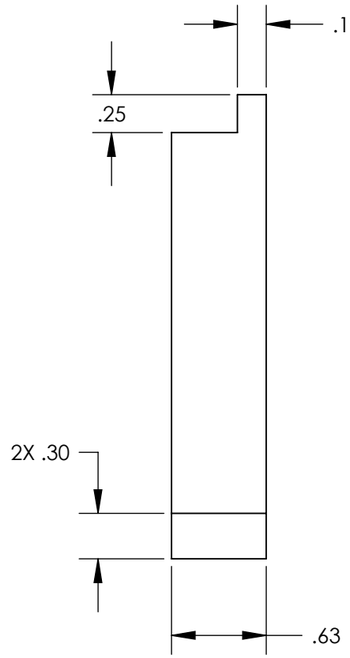
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

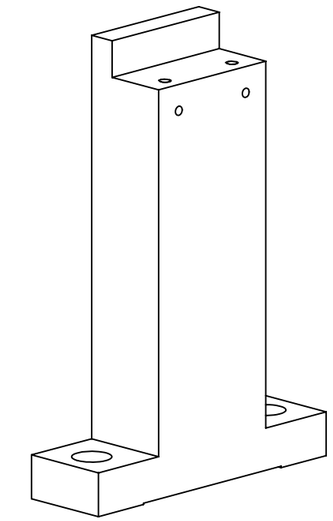
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

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









NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)					
DIMENSIONS ARE IN 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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME FARADAY ISOLATOR BEAM DUMP MOUNT	
	MATERIAL 6061-T6 Al	FINISH 63 µinch	SYSTEM ADVANCED LIGO	SUB-SYSTEM AOS	NEXT ASSY D1002364

			SIZE	DWG. NO.	REV.
DESIGNER			B	D1002362	v1
DRAFTER	MRUIZ	09 SEP 2010			
CHECKER					
APPROVAL			SCALE: 1:1	PROJECTION:	SHEET 1 OF 1

D1002362_aLIGO_AOS_D0900623_Faraday Isolator Beam Dump Mount, PART PDM REV: X-005, DRAWING PDM REV: X-008

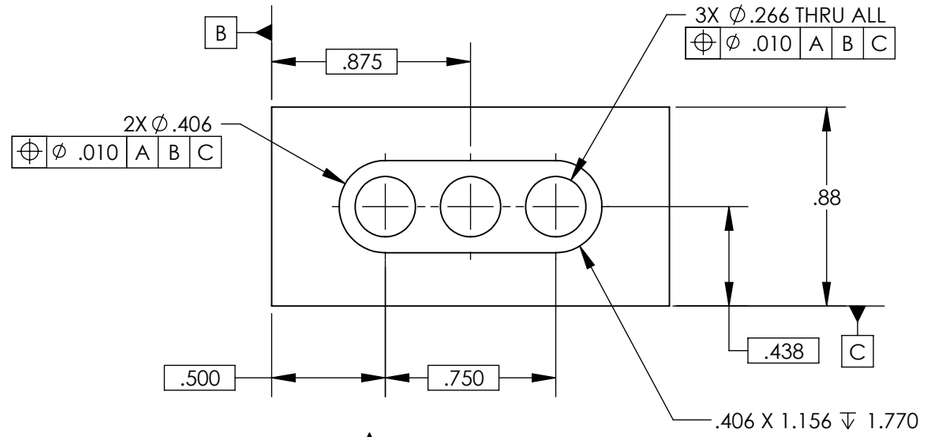
NOTES CONTINUED:

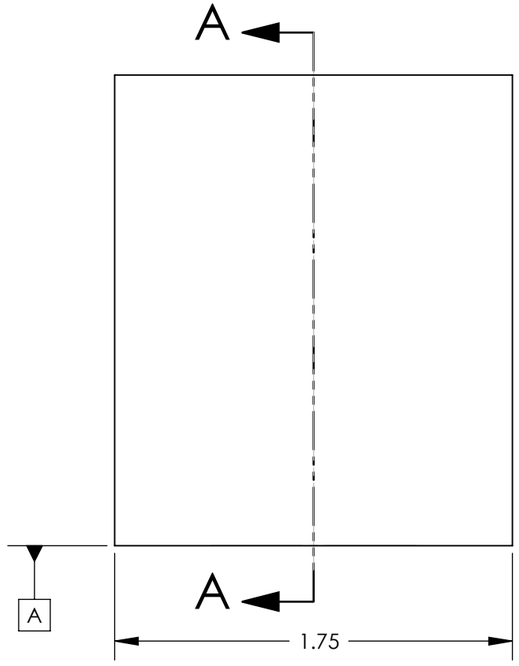
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

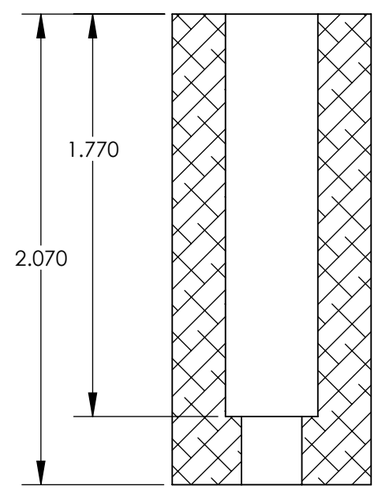
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: Output Faraday Isolator Dummy Weight		
	MATERIAL: 304, 316 OR 302 SSTL	FINISH: 63 µinch	SYSTEM	SUB-SYSTEM	DESIGNER		
			NEXT ASSY: D0900623		DRAFTER: M.RUIZ 01 OCT 2010	SIZE: B	DWG. NO.: D1002533 REV: v1
					CHECKER		
					APPROVAL	SCALE: 3:2	PROJECTION: SHEET 1 OF 1

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

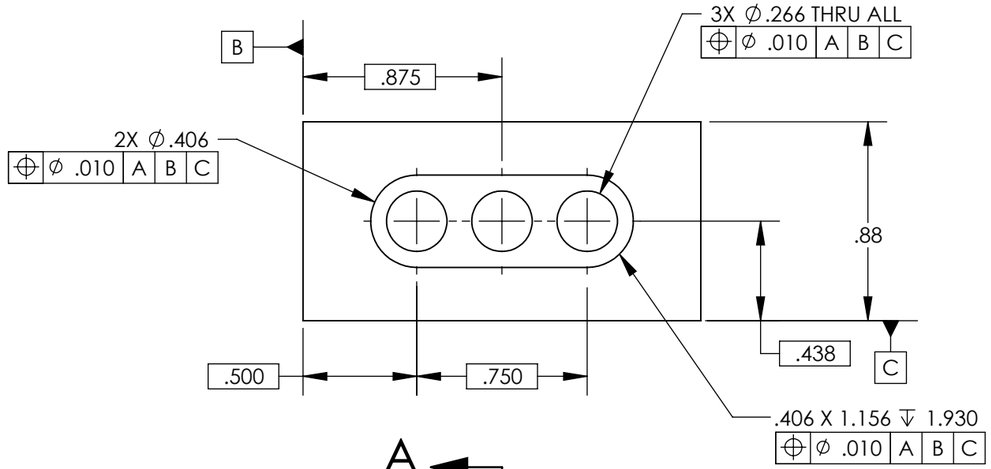
REV.	DATE	DCN #	DRAWING TREE #
v1	07 OCT 2010	E1000563	-
-	-	-	-
-	-	-	-

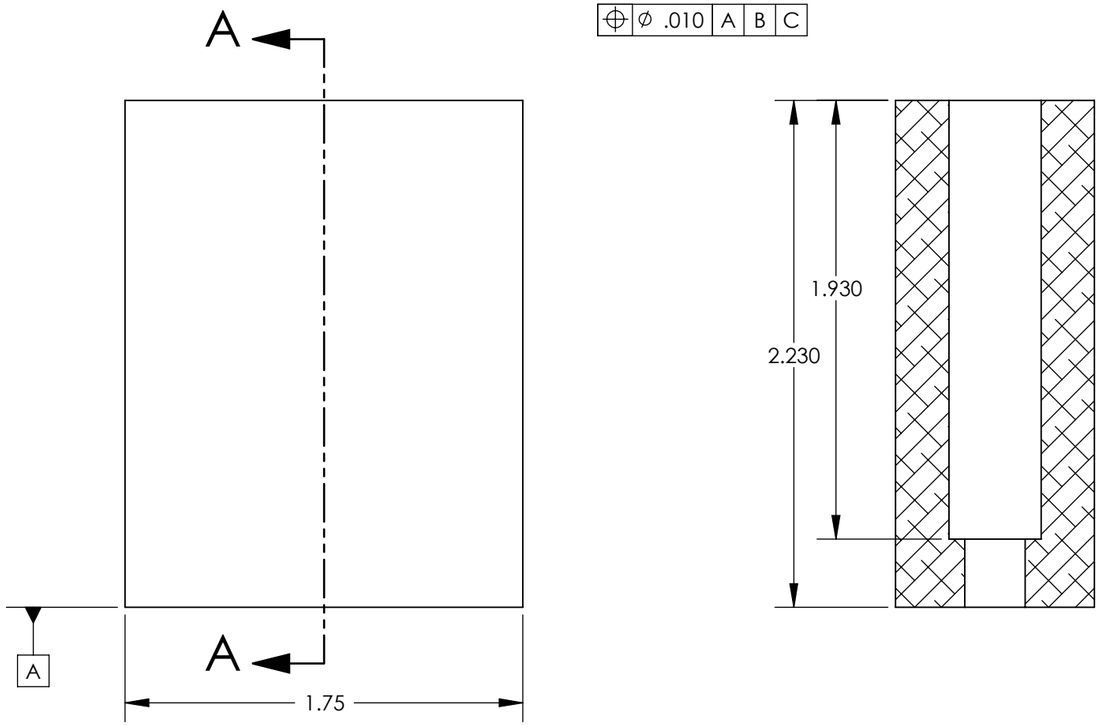
NOTES CONTINUED:

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: DXXXXXXX-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.





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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: Output Faraday Isolator Dummy Weight (rotate)			
MATERIAL: 304, 316 OR 302 SSTL	FINISH: 63 µinch		SYSTEM	SUB-SYSTEM	DESIGNER			SIZE: B
			NEXT ASSY: D0900623		DRAFTER: MRUIZ	01 OCT 2010		DWG. NO.: D1002540
					CHECKER			REV.: 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

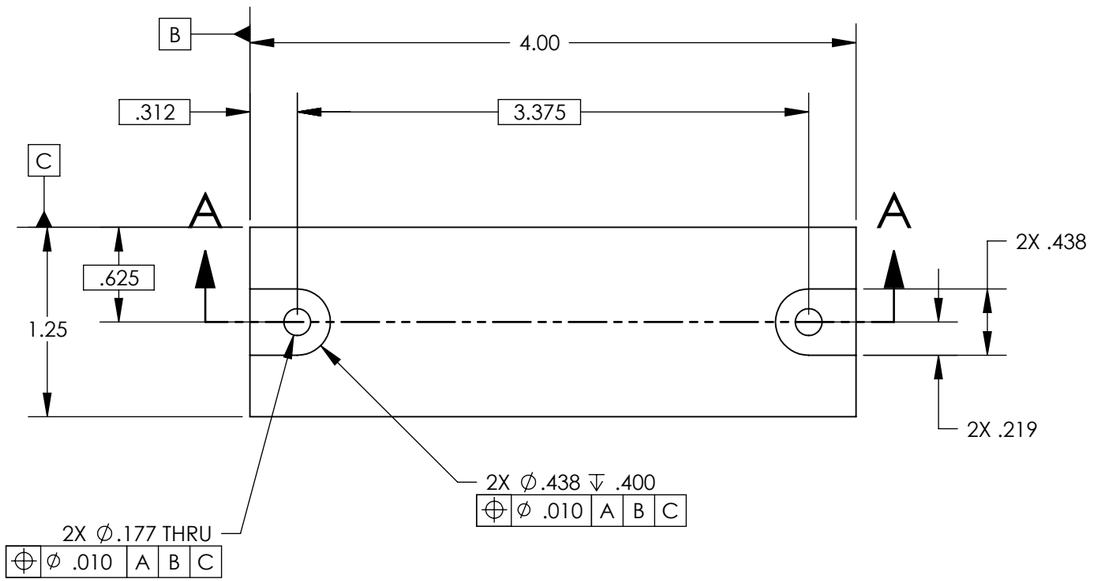
NOTES CONTINUED:

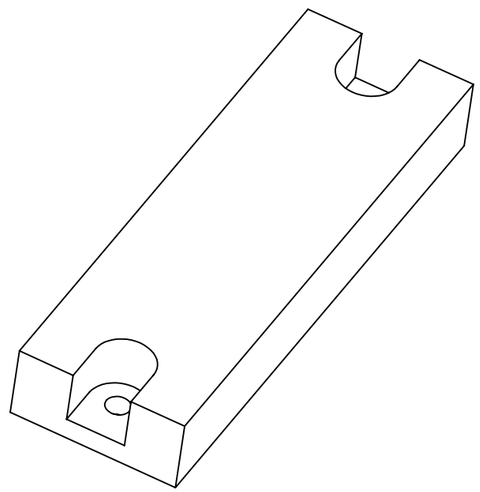
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

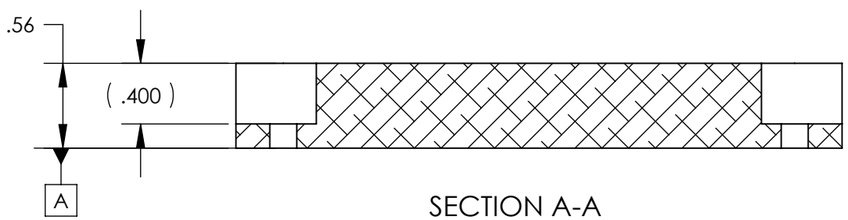
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.

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 ± .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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: TABLE BALANCE WEIGHT, .75#		
	MATERIAL: 304, 316 OR 302 SSTL	FINISH: 125 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER		
			NEXT ASSY: D0900623		DRAFTER: MRUIZ 01 OCT 2010	SIZE: B	DWG. NO.: D1002542 REV.: v1
					CHECKER		
					APPROVAL	SCALE: 1:1	PROJECTION: SHEET 1 OF 1

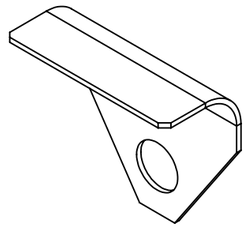
D1002542_AdLIGO_AOS_FI D0900623_Table Balance Weight. 75#, PART PDM REV: X-007, DRAWING PDM REV: X-004

NOTES CONTINUED:

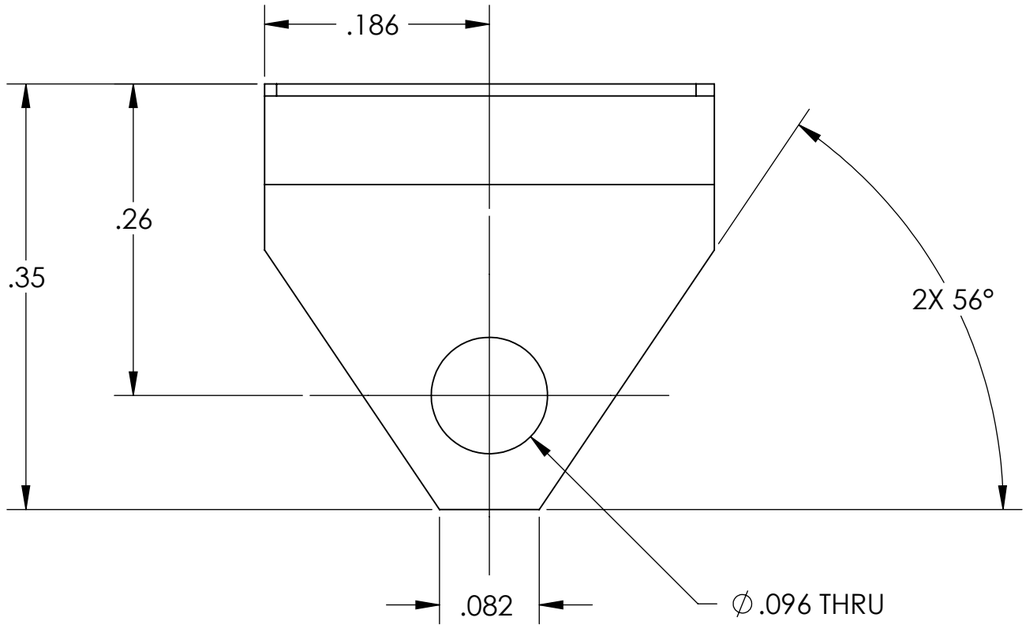
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM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

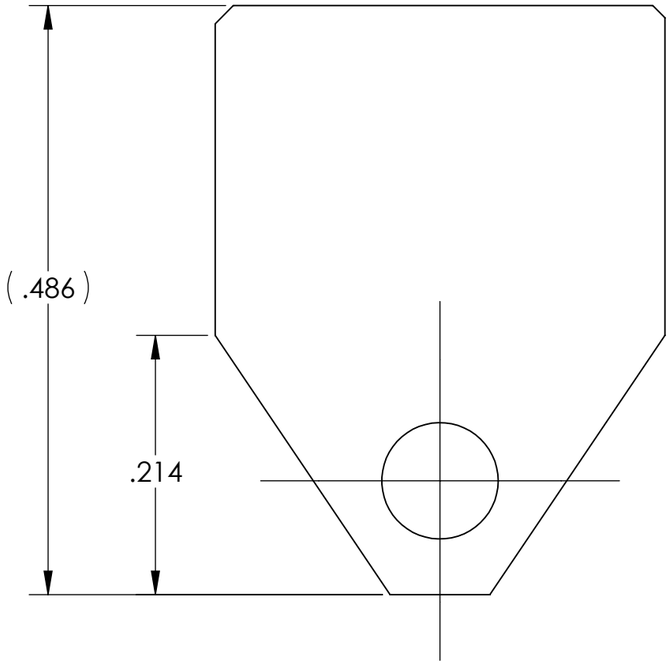
6. APPROXIMATE WEIGHT = 0.0004 LB.
7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

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

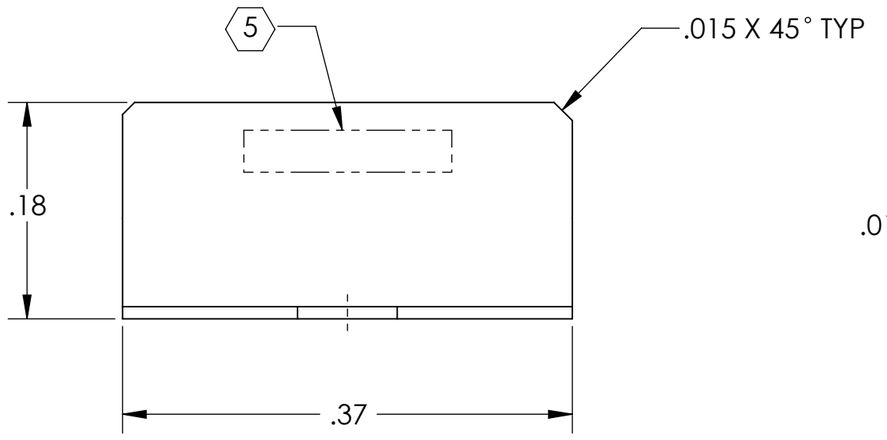


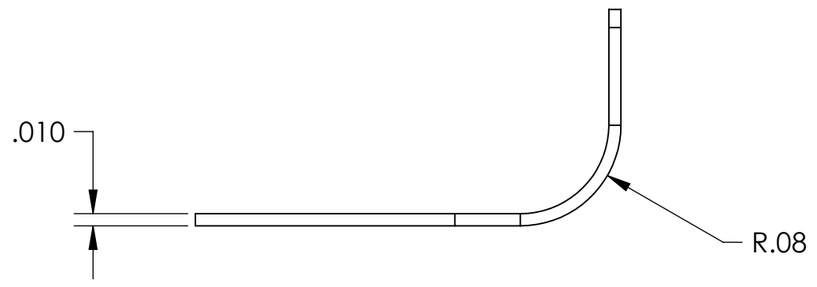
GENERAL VIEW
FOR REFERANCE ONLY
NO SCALE





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.		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME: CLIP				
	MATERIAL: 304 SSTL	FINISH: 63 µinch	SYSTEM: ADVANCED LIGO	SUB-SYSTEM: AOS	DESIGNER: N. KILPATRICK 06 JAN 2011	SIZE: B	DWG. NO.: D1100027	REV.: v1	
			NEXT ASSY: D0900614 D0900615 D1002364		DRAFTER: N. KILPATRICK 06 JAN 2011				
					CHECKER				
					APPROVAL	SCALE: 8:1	PROJECTION:	SHEET 1 OF 1	

D1100027_aLIGO_AOS_D0900614_Faraday Isolator CLIP, PART PDM REV: X-009, DRAWING PDM REV:

DOCUMENT CHANGE NOTICE (DCN):- Manufacture OUTPUT FARADAY ISOLATOR

(1) DCN No. E1000563-v2

(2) Documents Affected

DOCUMENT No.	TITLE
D0900136	FARADAY ISOLATOR ASSEMBLY-V1
D0900655	STRUCTURAL WELDMENT ASSY, OMC-V1
D0900048	MAGNET HOLDER ASSEMBLY-V1
D0900026	MAGNET MOUNTING PLATE-V2
D0901569	MAGNET PLATE MOUNTING FRONT BRACKET-V1
D0901570	MAGNETIC PLATE MOUNTING BACK BRACKET-V1
D1002112	MAGNETIC PLATE MOUNTING BACK (LOWERED) BRACKET-V1
D0900027	COPPER PLATE-V2
D0900579	BLADE GUARD ASSEMBLY-V1
D0901271	BLADE GUARD CROSSPIECE-V3
D0900578	BLADE GUARD RISER-V1
D0900623	FARADAY ISOLATOR TABLE ASSEMBLY-V1
D0900015	FARADAY ISOLATOR TABLE-V2
D1001958	WIRE SUPPORT BLOCK ASSEMBLY-V1
D1001960	WIRE SUPPORT BLOCK-V1
D0900464	ROTATOR 20mm 1064nM-VAC COMPATIBLE
D0900615	PRISM MOUNT ASSEMBLY RH-V2
D0900620	PRISM MOUNT BASE RH-V2
D1001859	FIXED STOP RH-V1
D0900617	OPTICAL PRISM-V1
D1001864	PRISM BEAM DUMP-V1
D1001862	PRISM BASE SUPPORT-V2
D1001860	SPRING BLOCK RH-V1
D1001861	U-SPRING-V1
D0900618	OPTICAL PRISM TOP PLATE-V1
D0900619	CLIP-V1
D1001918	INPUT BAFFLE ASSEMBLY-V2
D1001920	INPUT BAFFLE BEAM DUMP-V1
D1001915	INPUT BAFFLE HOLDER-V2
D1001917	INPUT BAFFLE BASE-V1
D1001916	INPUT BAFFLE SIDE SUPPORT-V1
D1001924	C-MOUNT RETICLE-V1
D1001919	BEAM DUMP MOUNTING CLAMP-V1
D0900614	PRISM MOUNT ASSEMBLY LH-V2
D0900616	PRISM MOUNT BASE LH-V2
D1001862	PRISM BASE SUPPORT-V1
D1001864	PRISM BEAM DUMP-V1
D1001870	FIXED STOP LH-V1
D1001871	SPRING BLOCK LH-V1
D0900353	HALF WAVE PLATE HOLDER ASSEMBLY-V2
D0900352	HALF WAVE PLATE HOLDER-V2
D0900440	TFP POLARIZER PLATE ASSEMBLY-V1
D0900439	TFP POLARIZER PLATE-V1
D1001919	BEAM DUMP MOUNTING CLAMP-V1
D1001963	OUTPUT ALIGNMENT FIXTURE ASSEMBLY-V1

D1001959	RETICLE HOLDER-V1
D1001961	OUTPUT ALIGNMENT FIXTURE BASE-V1
D1001962	OUTPUT ALIGNMENT FIXTURE SUPPORT-V1
D1001924	C-MOUNT RETICLE-V1
D0900778	MAGNET ATTACHMENT PLATE-V2
D1002520	TABLE BALANCE WEIGHT, Add on-V1
D1002364	FARADAY ISOLATOR BEAM DUMP ASSEMBLY-V2
D1002363	FARADAY ISOLATOR BEAM DUMP-V1
D1002362	FARADAY ISOLATOR BEAM DUMP MOUNT-V2
D0902845	REFLECTION BAFFLE-V2
D1002256	EARTHQUAKE CROSSBAR IN ASSEMBLY-V1
D1002257	CROSSBAR PLATE IN-V1
D0900169	CROSS SIDE-V2
D0900170	EARTHQUAKE CROSSBAR ASSEMBLY-V1
D0900168	CROSS PLATE-V2
D0901514	BLADE CLAMP PLATFORM--V1
D0900586	UPPER WIRE ASSEMBLY-V2
D0900541	F1 UPPER BLADE-V2
D1002168	MUSIC WIRE SPLIT CLAMP 3--V1
D1002169	MUSIC WIRE SPLIT CLAMP 4--V1
D1002170	LOWER MUSIC WIRE 2--V1
D0900582	MUSIC WIRE SPLIT CLAMP 1-V2
D0900583	MUSIC WIRE SPLIT CLAMP 2-V3
D0900588	WIRE ADJUSTABLE ADAPTER-V2
D0900566	UP BLADE CLAMP TOP-V2
D1100027	CLIP
D1100019	HALF WAVE QUARTZ HOLDER-V1
D1100020	HALF WAVE QUARTZ NUT-V1
D1100029	HALF WAVE QUARTZ ASSY-V1
D1100030	HALF WAVE QUARTZ SPACER-V1

(3) CHANGE DESCRIPTION (FROM / TO):-

D1002362 ZONES C4 & C7 DIMENSION CHANGE FROM: .19 TO .27, FROM .305 TO .228.
D1001915 ZONE C3 DIMENISON CHANGE FROM .125 TO .202.
D0900620 REVISED HOLE LOCATION FROM .305 TO .228
D0900619 NAME CORRECTION FROM SPRING CLIP TO CLIP
D0900615 MATERIAL CALLOUT FROM #12 WELDER'S GLASS TO A424 18GA, TYPE I SSTL
D0900353 AND D0900352 CHANGE TO REVISION V2, DESIGN CHANGE
D0900583 DEEPER SLOT FROM .016 T0 .040
DELETE D1001863
ADDED D1100027, D1100019, D1100020, D1100029, D1100030

(4) REASON FOR CHANGE:-
SEE (3).

(5) SIGNATURES REQUESTED:-

(6) DCN DISTRIBUTION: -

aLIGO_AOS