

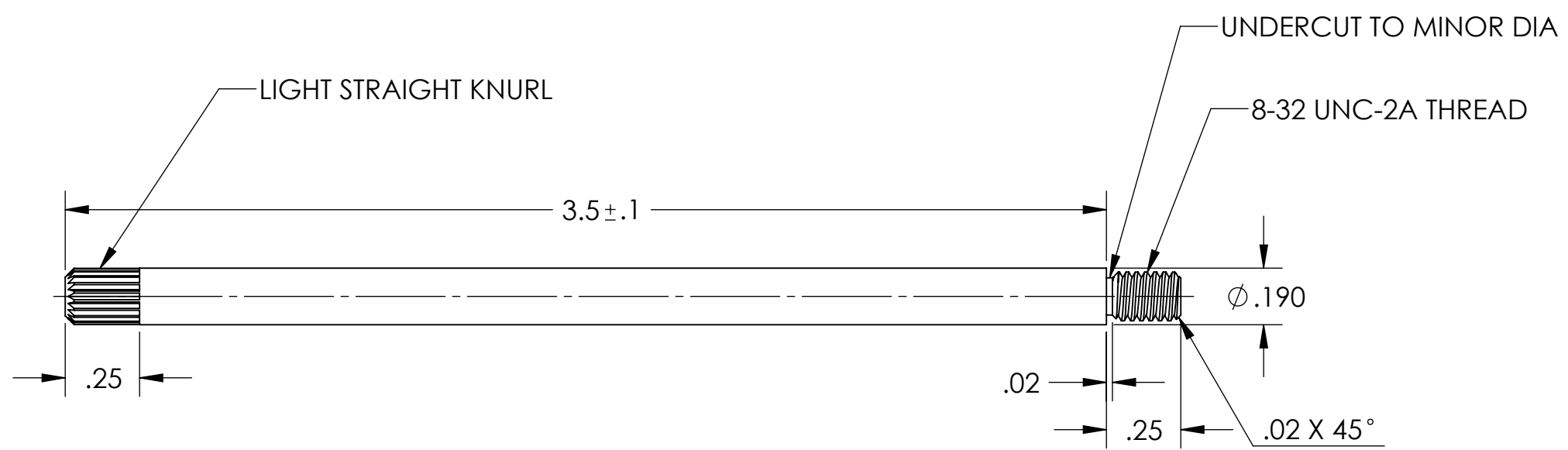
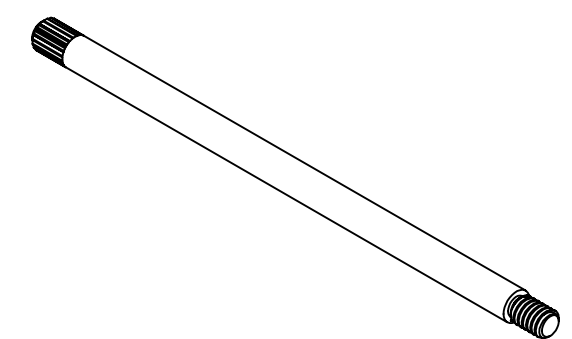
Vibration Absorber Assembly parts and quantities

Item	Part Number	Description	Rev	Qty/Assy	Total Qty
1	D1002347	PIN, LOCKING, VIBRATION ABSORBER	v3	2	328
2	D1000895	PLATE 2 FOR SEI VIBRATION ABSORBER 5 LB VERSION	v3	1	164
3	D1001059	CLAMP, VIBRATION ABSORBER HSTS	v1	1	50
4	D1001060	CLAMP, VIBRATION ABSORBER HLTS	v1	1	75
5	D1002081	OMC VIBRATION ABSORBER MOUNTING PLATE	v1	1	14
6	D1002174	FM/BS VIBRATION ABSORBER MOUNTING PLATE	v1	1	12
7	D1002425	VIBRATION ABSORBER, 5LB CLAMP BASE	v1	1	164
8	D1002426	Top Clamp for the SEI vibration absorber 5 Lb	v1	1	164
9	D1002427	Mass for the SEI vibration absorbers 5 Lb	v1	1	164
10	D1002594	UPPER QUAD VIBRATION ABSORBER MOUNTING PLATE	v2	1	30
11	D1002597	UPPER QUAD VIBRATION ABSORBER CLAMP	v1	1	30

8 7 6 5 4 3 2 1

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

REV.	DATE	DCN #	DRAWING TREE #
V1	7 SEPT 2010		
V2	24 SEPT 2010	E1000493	
V3	15 NOV 2010	E1000698	



D1002347 PIN, LOCKING, VIBRATION ABSORBER, qLIGO, SUS, PART PDM REV: X-005, DRAWING PDM REV: X-005

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A

D
C
B
A

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES TOLERANCES: .XX $\pm .01$.XXX $\pm .005$ ANGULAR $\pm 0.5^\circ$				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		PIN, LOCKING, VIBRATION ABSORBER	
MATERIAL 304 SSSL		FINISH 63 μ inch		SYSTEM ADVANCED LIGO SUB-SYSTEM SUS		DESIGNER K. BUCKLAND 3 SEPT 2010 DRAFTER K. BUCKLAND 7 SEPT 2010 CHECKER F. MATICHARD 6 OCT 2010 APPROVAL C. TORRIE 6 OCT 2010	
NEXT ASSY D1002424				SIZE DWG. NO. B D1002347		REV. v3	
				SCALE: 2:1		PROJECTION: SHEET 1 OF 1	

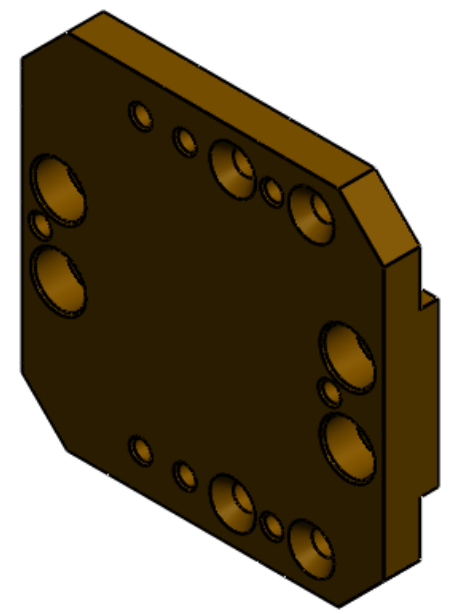
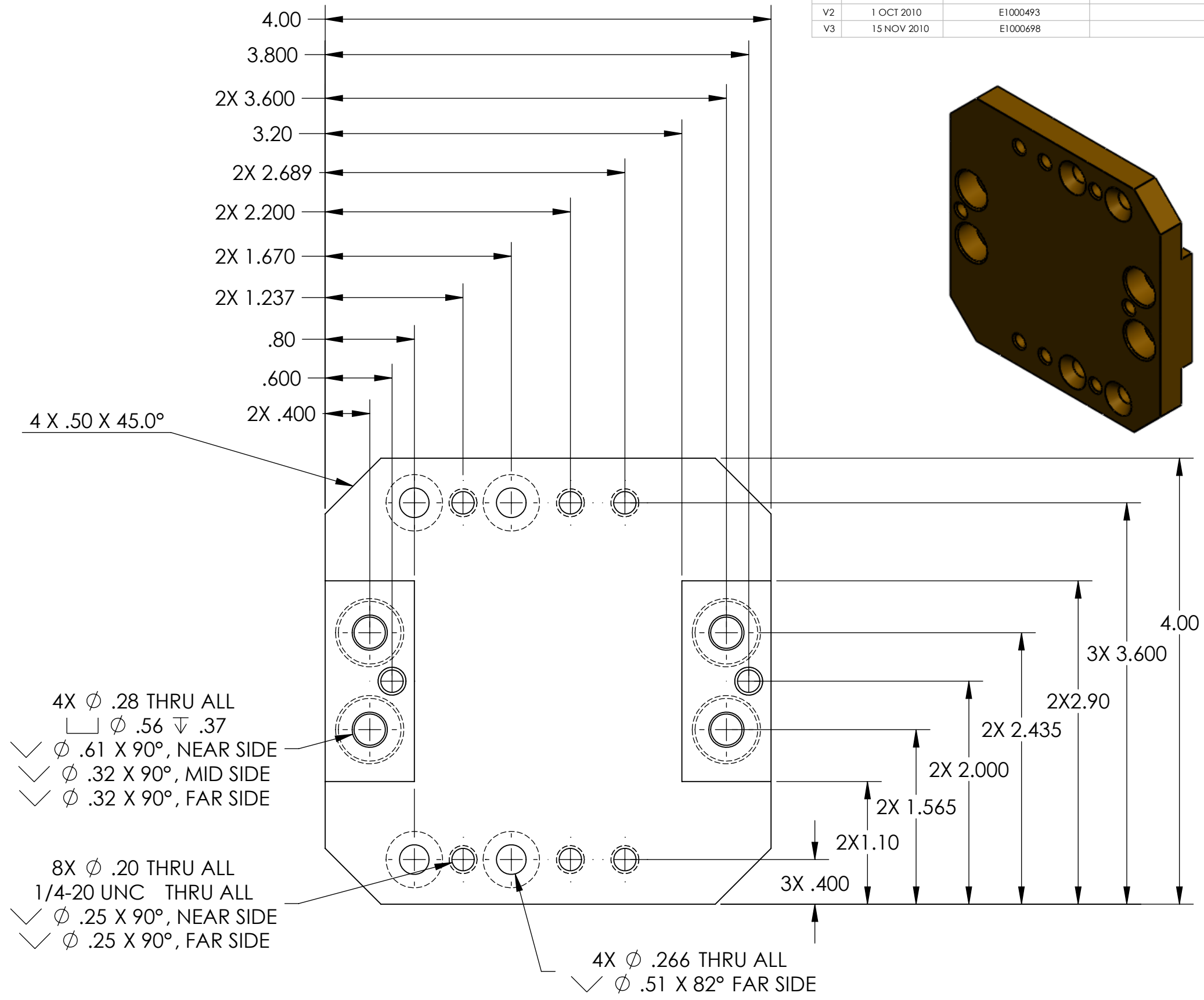
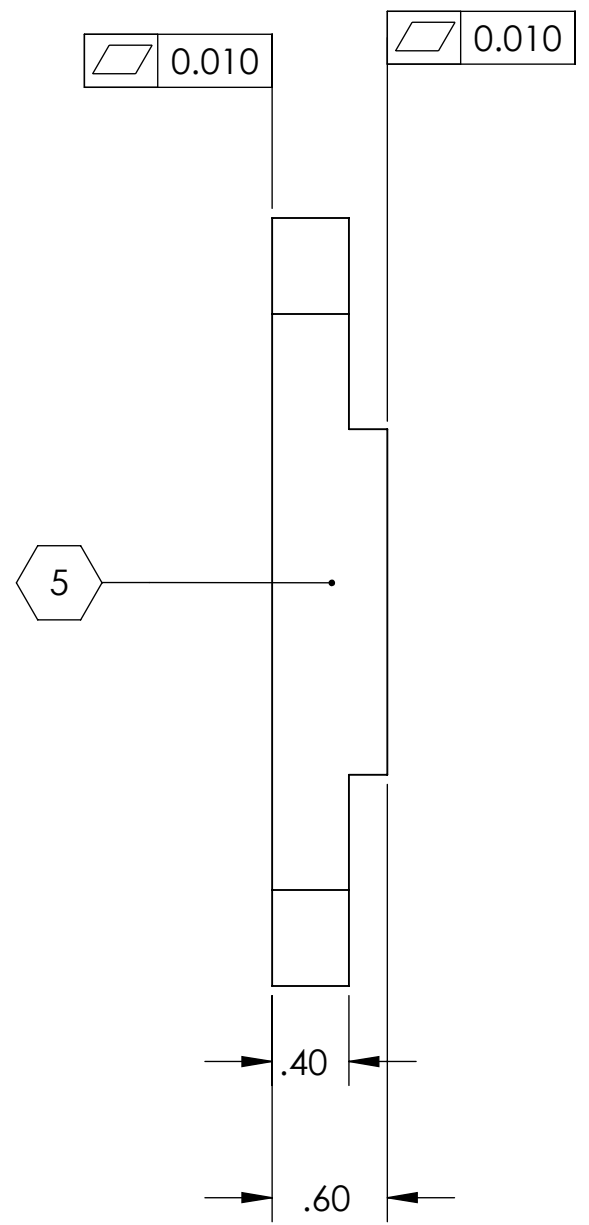
8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

NOTES CONTINUED:
 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
 EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED (INCLUDED SANDING OR SCOURING FOR MATTE FINISH).
 7. ALL PARTS TO BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATIONS E0900364.
 8. A TAPPED HOLE PITCH DIAMETER LIMIT OF H11 APPLIES TO ALL TAPPED HOLES.

REV.	DATE	DCN #	DRAWING TREE #
V1	14 APR 2010	E1000134	
V2	1 OCT 2010	E1000493	
V3	15 NOV 2010	E1000698	

D1000895 Plate 2 for SEI Vibration absorber 5 Lb version, PART PDM REV: X-007, DRAWING PDM REV: X-009



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME						
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± 0.015 .XXX ± 0.005 ANGULAR ± 0.1°				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.		Plate 2 for SEI Vibration absorber 5 Lb version						
MATERIAL		FINISH		SYSTEM		SUB-SYSTEM		DESIGNER	S.BISCANS	14 APR 2010	SIZE DWG. NO.	REV.
6061-T6 Al		63 μ inch		ADVANCED LIGO		SEI		DRAFTER	S.BISCANS	14 APR 2010	B	D1000895
				NEXT ASSY				CHECKER	F.MATICHARD	22 APR 2010		v2
				D1000942, D1000954				APPROVAL	K.MASON	22 APR 2010	SCALE: 1:1	PROJECTION:
											1	SHEET 1 OF 1

8 7 6 5 4 3 2 1

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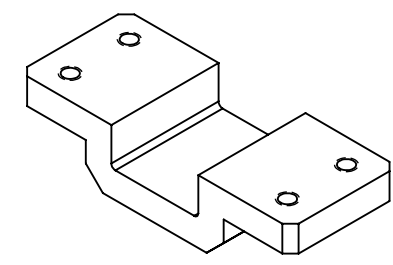
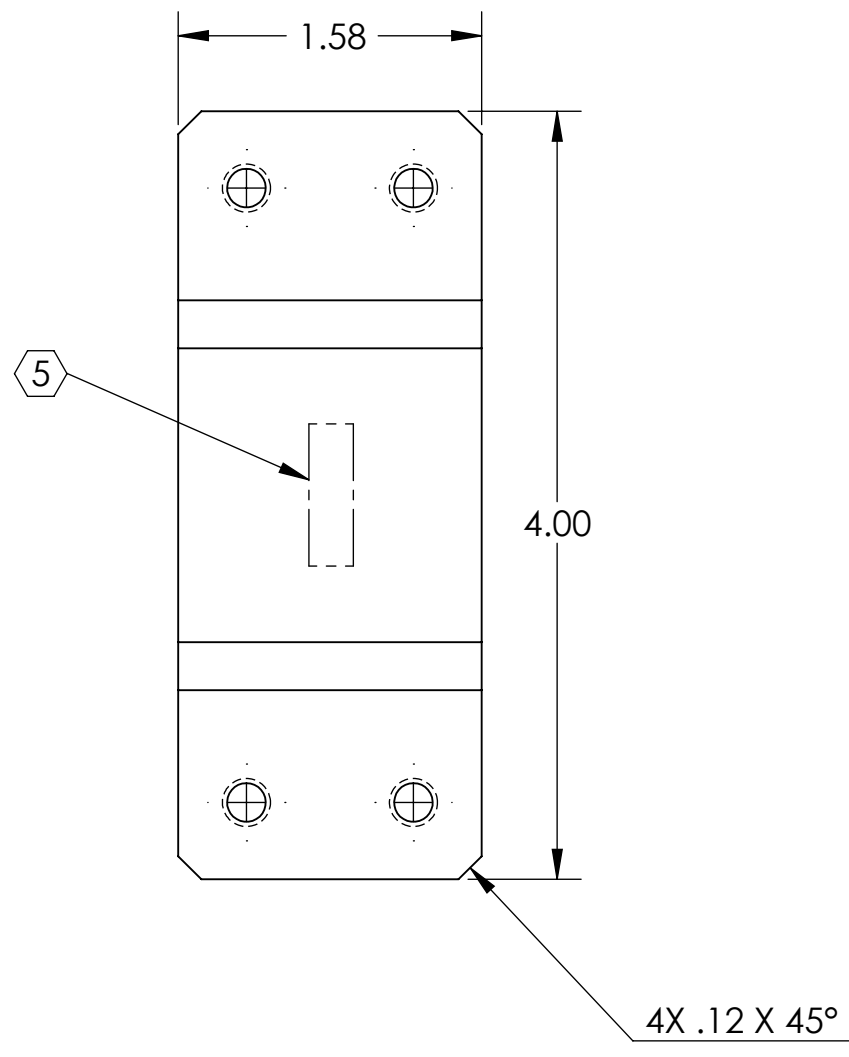
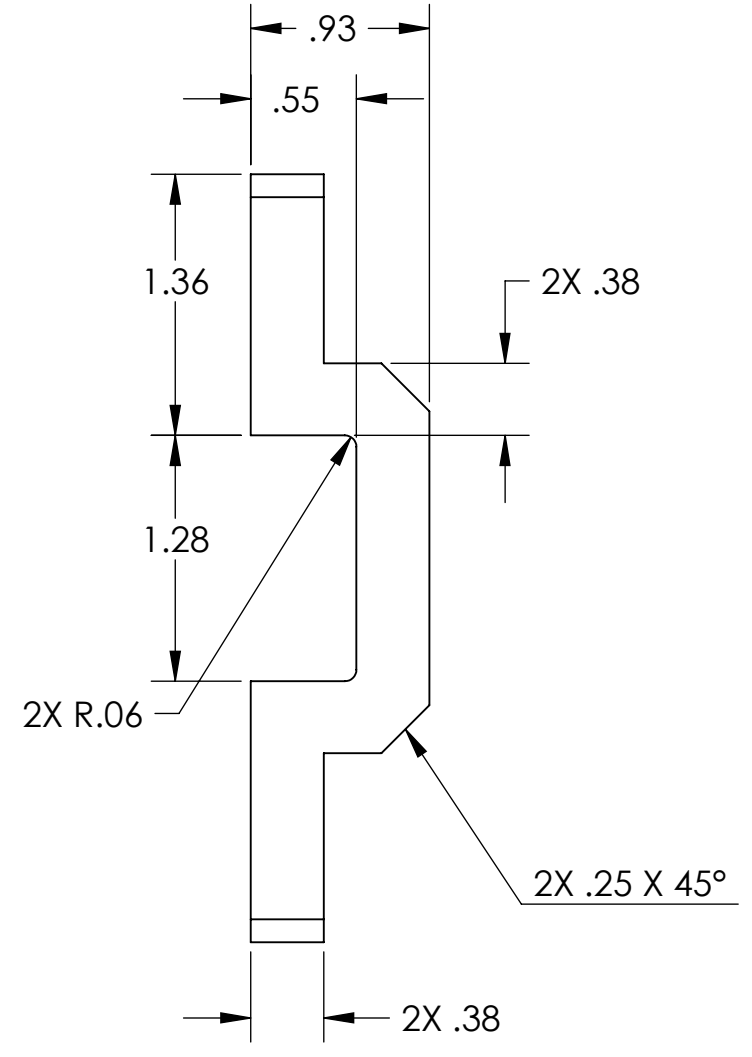
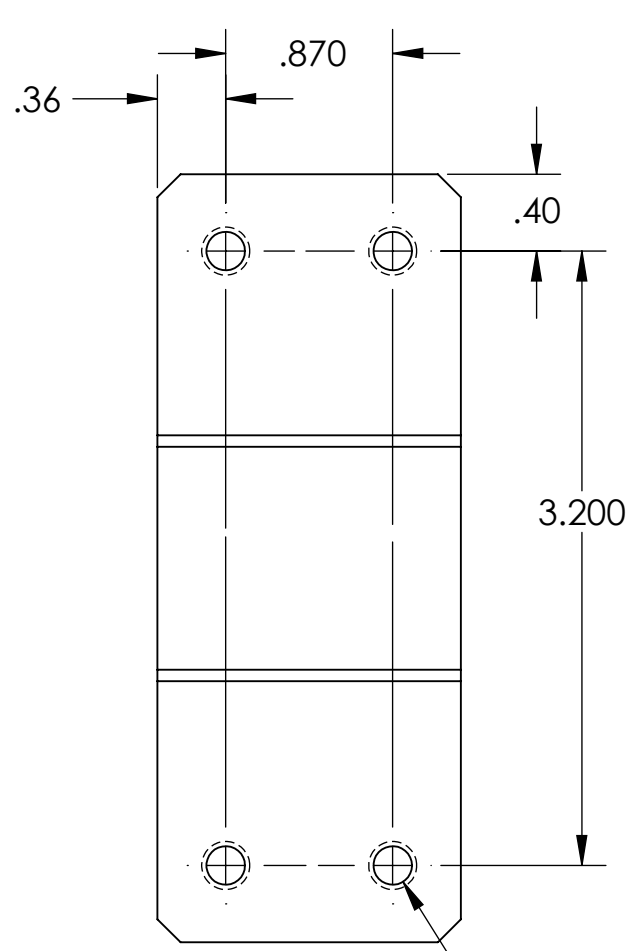
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NOTES CONTINUED:

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

REV.	DATE	DCN #	DRAWING TREE #
V1	10 AUG 2010	E1000493	



D1001059 aLIGO HSTS vibration absorber clamp, PART PDM REV: X-004, DRAWING PDM REV: X-004

D C B A

D C B A

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN 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.		CLAMP, VIBRATION ABSORBER, HSTS	
MATERIAL 6061-T6 Al		FINISH 63 μinch		SYSTEM ADVANCED LIGO		SUB-SYSTEM SUS	
NEXT ASSY D1002424				DESIGNER K. BUCKLAND 3 MAY 2010		SIZE DWG. NO. B D1001059	
				DRAFTER K. BUCKLAND 4 MAY 2010		REV. v1	
				CHECKER F. MATICHARD 6 OCT 2010		SCALE: 1:1	
				APPROVAL C. TORRIE 6 OCT 2010		PROJECTION: SHEET 1 OF 1	

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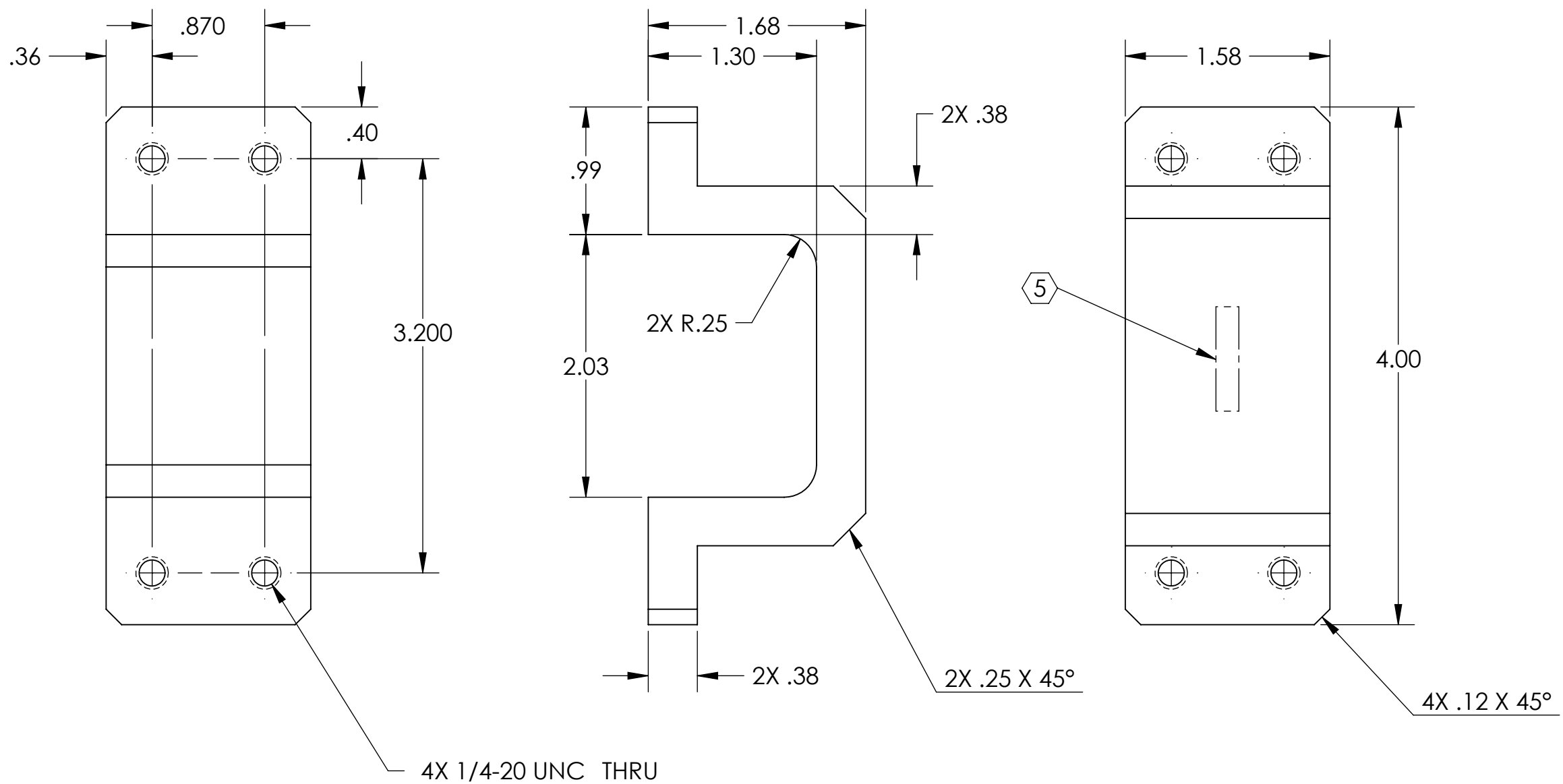
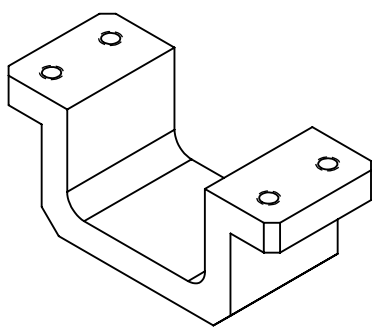
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8 7 6 5 4 3 2 1

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

REV.	DATE	DCN #	DRAWING TREE #
V1	10 AUG 2010	E1000493	



D1001060 aLIGO HLTS vibration absorber clamp, PART PDM REV: X-005, DRAWING PDM REV: X-004

D C B A

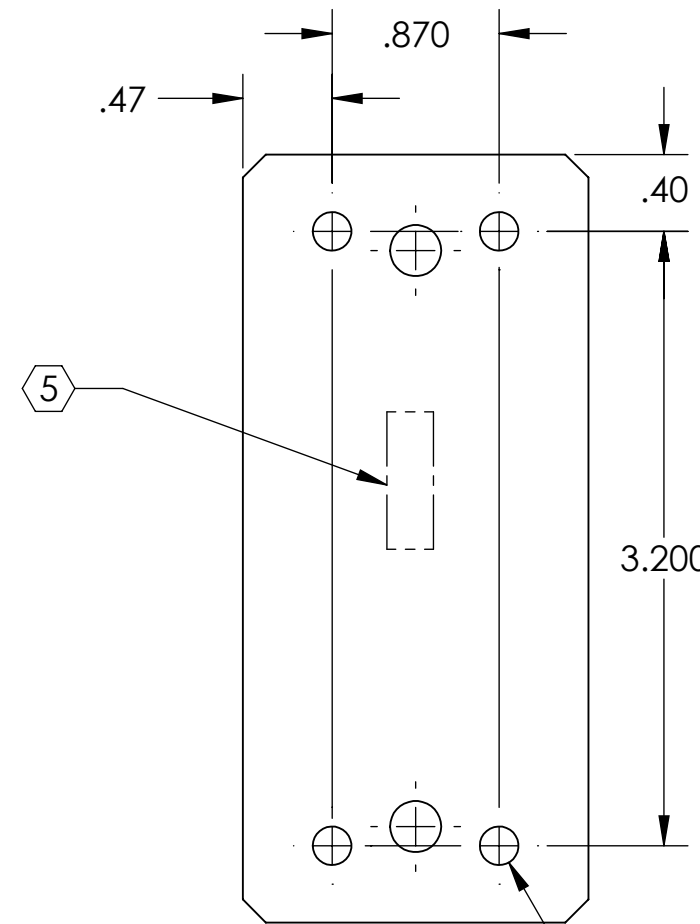
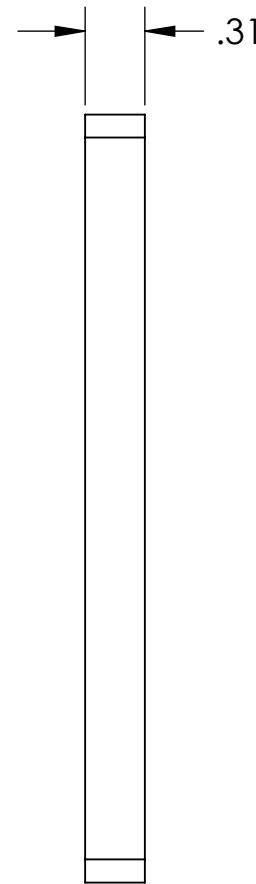
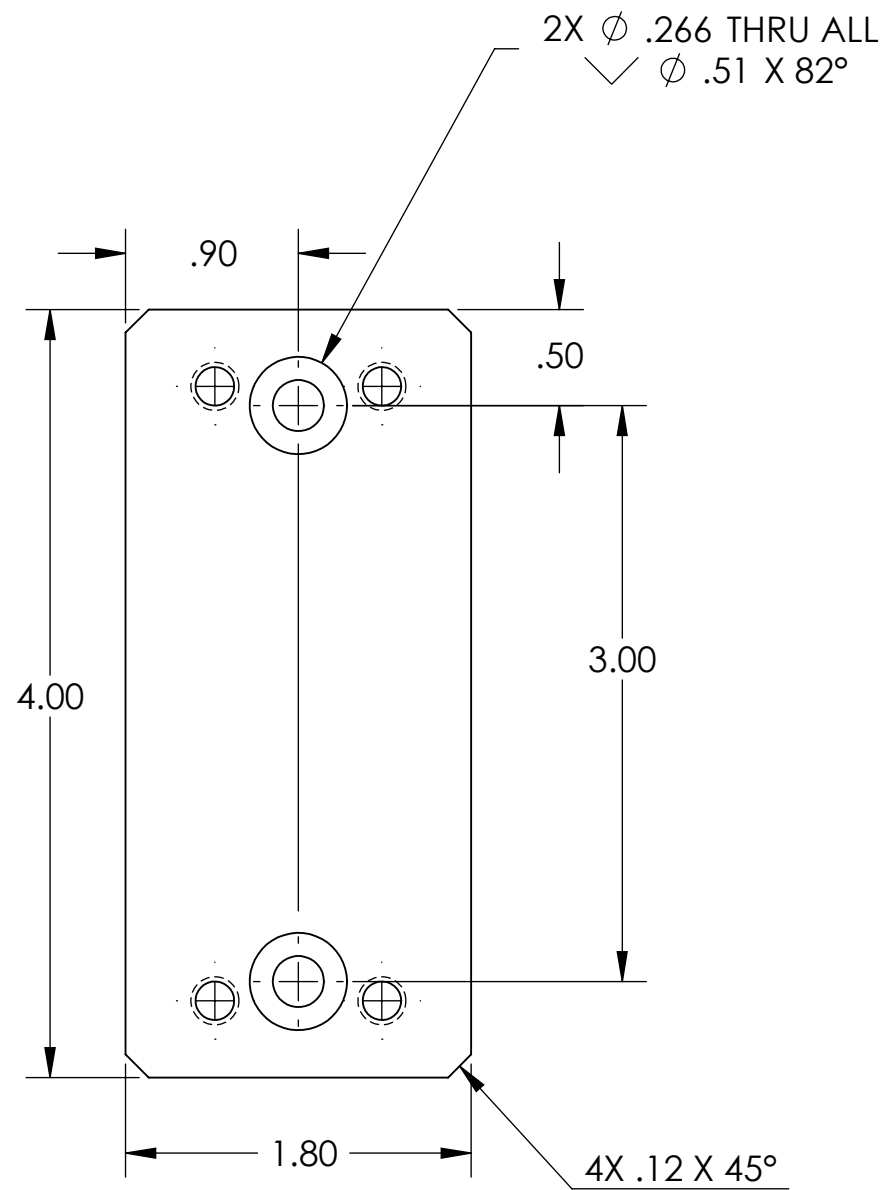
D C B A

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN 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.		CLAMP, VIBRATION ABSORBER, HLTS	
MATERIAL 6061-T6 Al		FINISH 63 μinch		SYSTEM ADVANCED LIGO		SUB-SYSTEM SUS	
NEXT ASSY D1002424				DESIGNER K. BUCKLAND 3 MAY 2010		SIZE DWG. NO. B D1001060	
				DRAFTER K. BUCKLAND 4 MAY 2010		REV. v1	
				CHECKER F. MATICHARD 6 OCT 2010		SCALE: 1:1	
				APPROVAL C. TORRIE 6 OCT 2010		PROJECTION:	
						SHEET 1 OF 1	

8 7 6 5 4 3 2 1

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

REV.	DATE	DCN #	DRAWING TREE #
V1	10AUG 2010	E1000493	



4X ϕ .20 THRU ALL
 1/4-20 UNC THRU ALL
 +.005 OVERSIZE TAP

D1002081 CALIGO OMC VIBRATION ABSORBER MOUNTING PLATE, PART PDM REV: X-004, DRAWING PDM REV: X-003

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

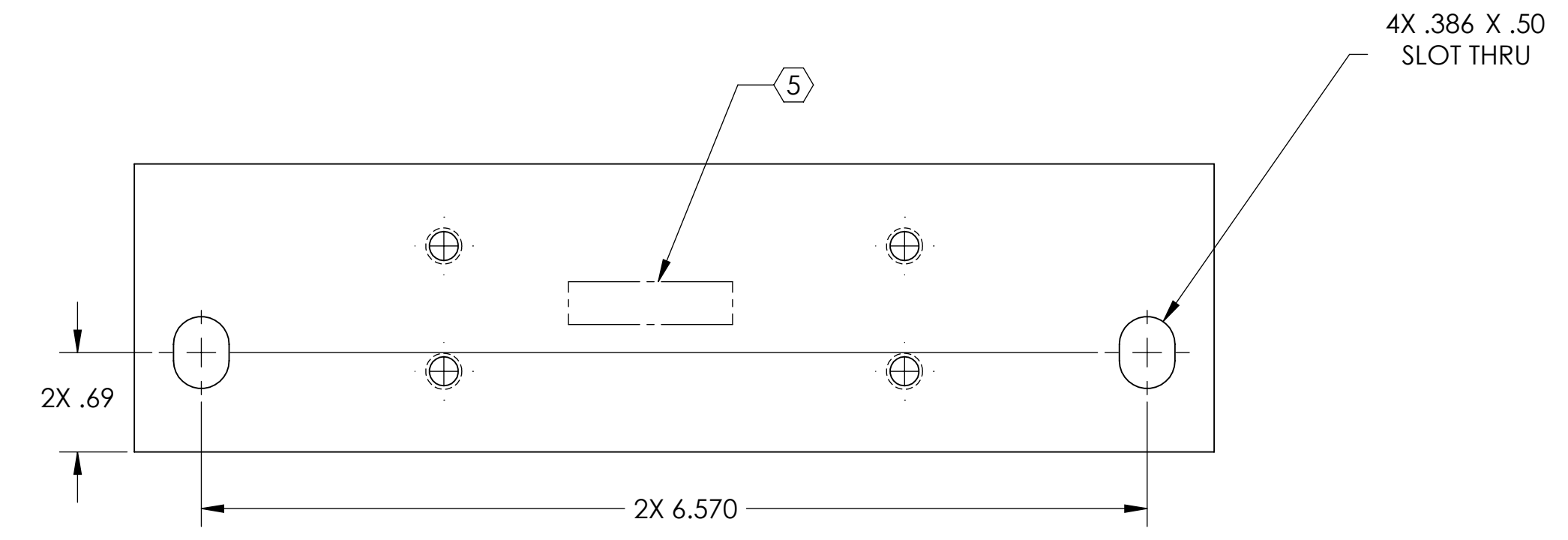
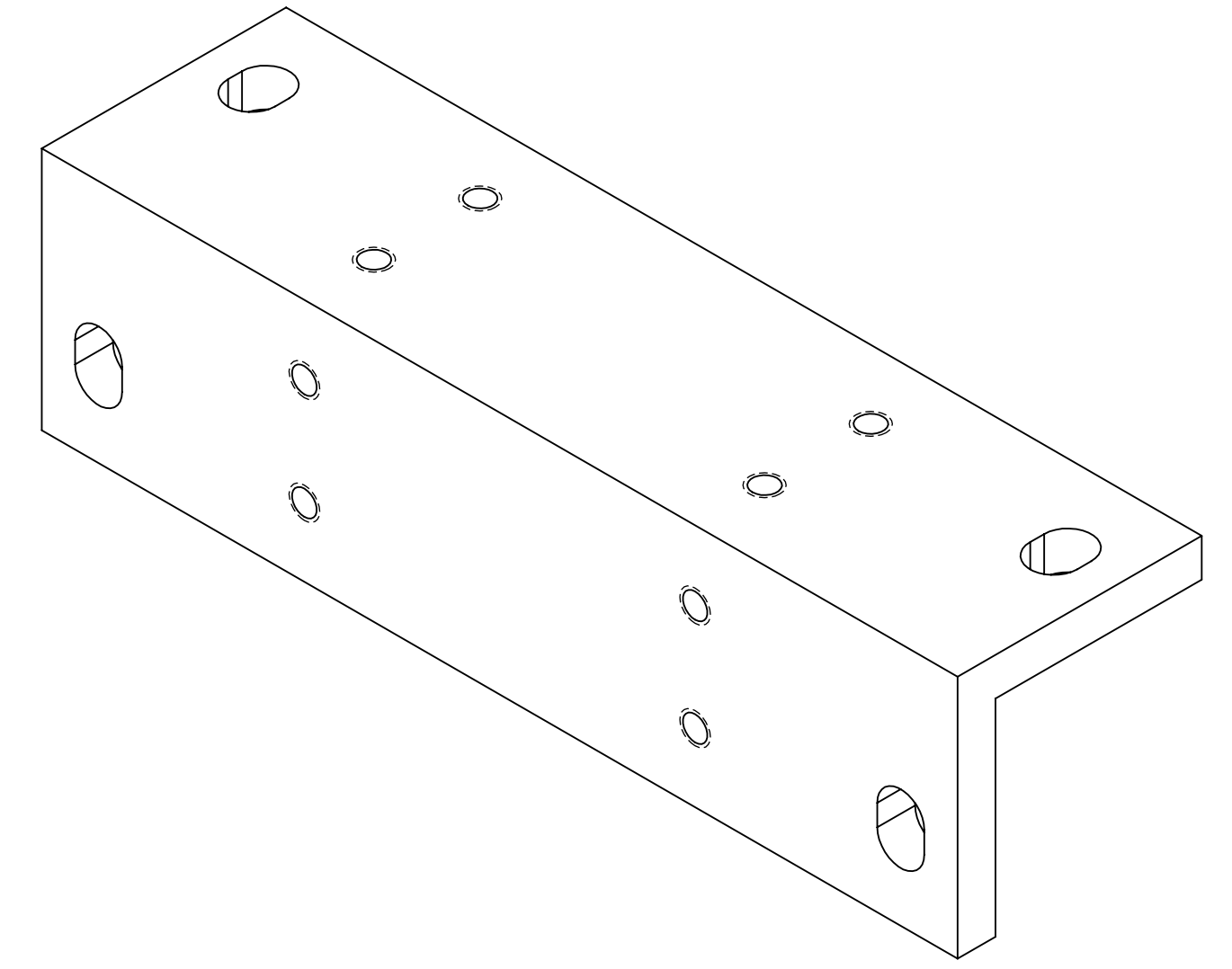
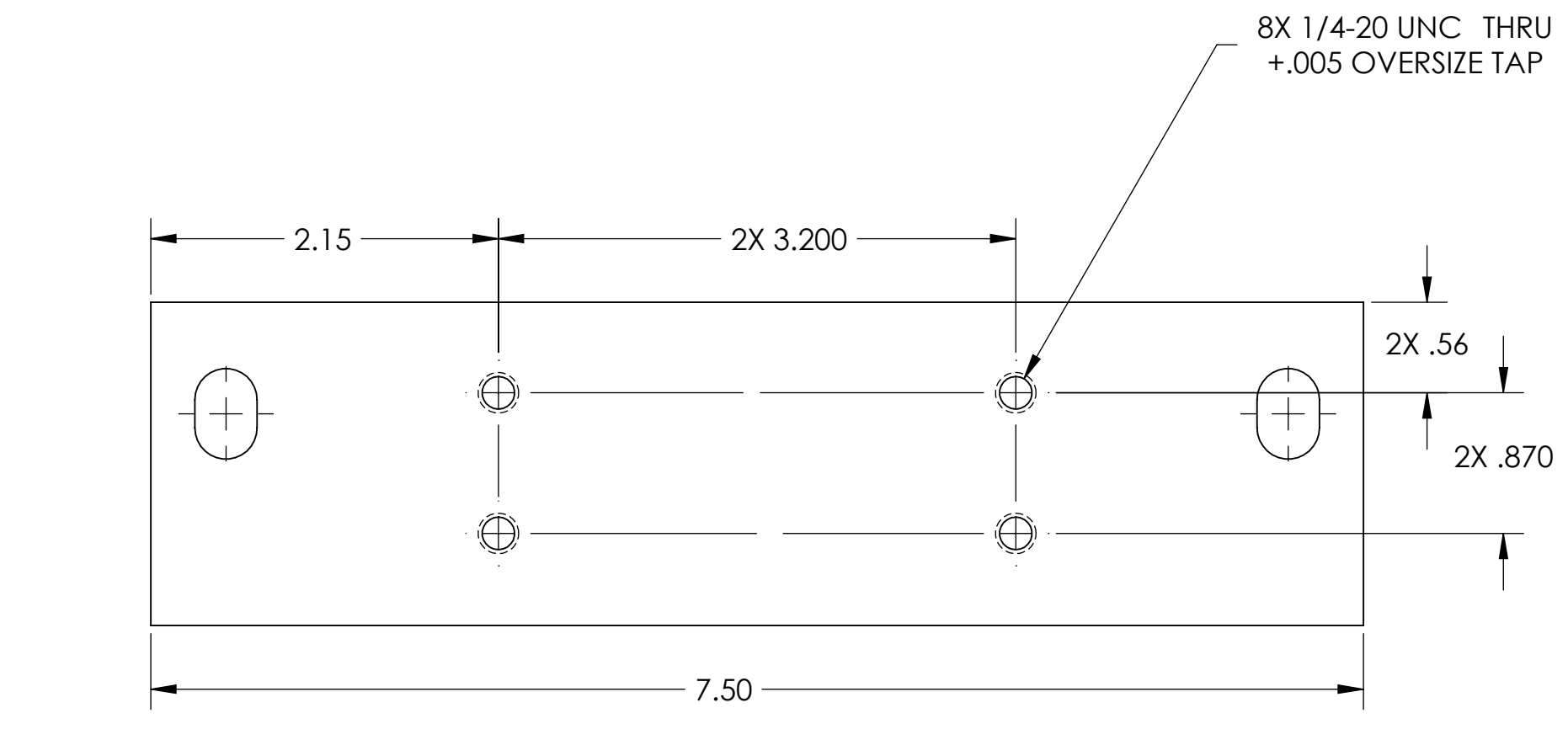
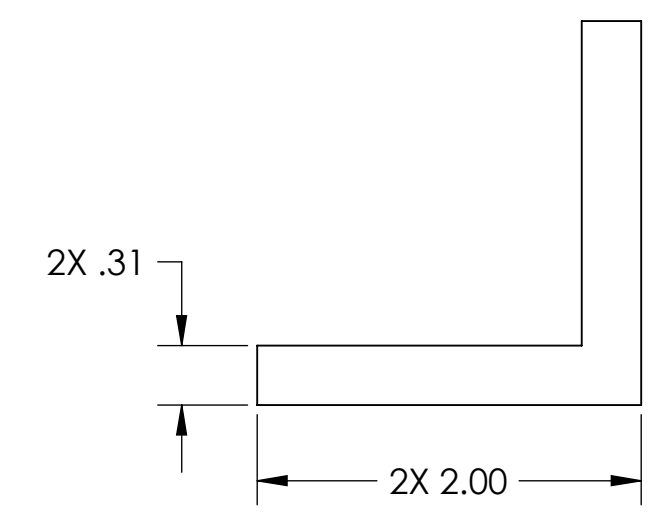
DIMENSIONS ARE IN INCHES	
TOLERANCES: .XX \pm .01 .XXX \pm .005 ANGULAR \pm 0.5°	
1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.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

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	PART NAME		
	OMC VIBRATION ABSORBER MOUNTING PLATE		
	DESIGNER	K. BUCKLAND	
SYSTEM	ADVANCED LIGO	SUB-SYSTEM	SUS
DRAFTER	K. BUCKLAND	DATE	10 AUG 2010
CHECKER	F. MATICHARD	DATE	6 OCT 2010
APPROVAL	C. TORRIE	DATE	6 OCT 2010
NEXT ASSY	D1002424		

SIZE	DWG. NO.	REV.
B	D1002081	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: DXXXXXX-VY, TYPE-XX, S/N XXX

REV.	DATE	DCN #	DRAWING TREE #
V1	13 AUG 2010	E1000493	



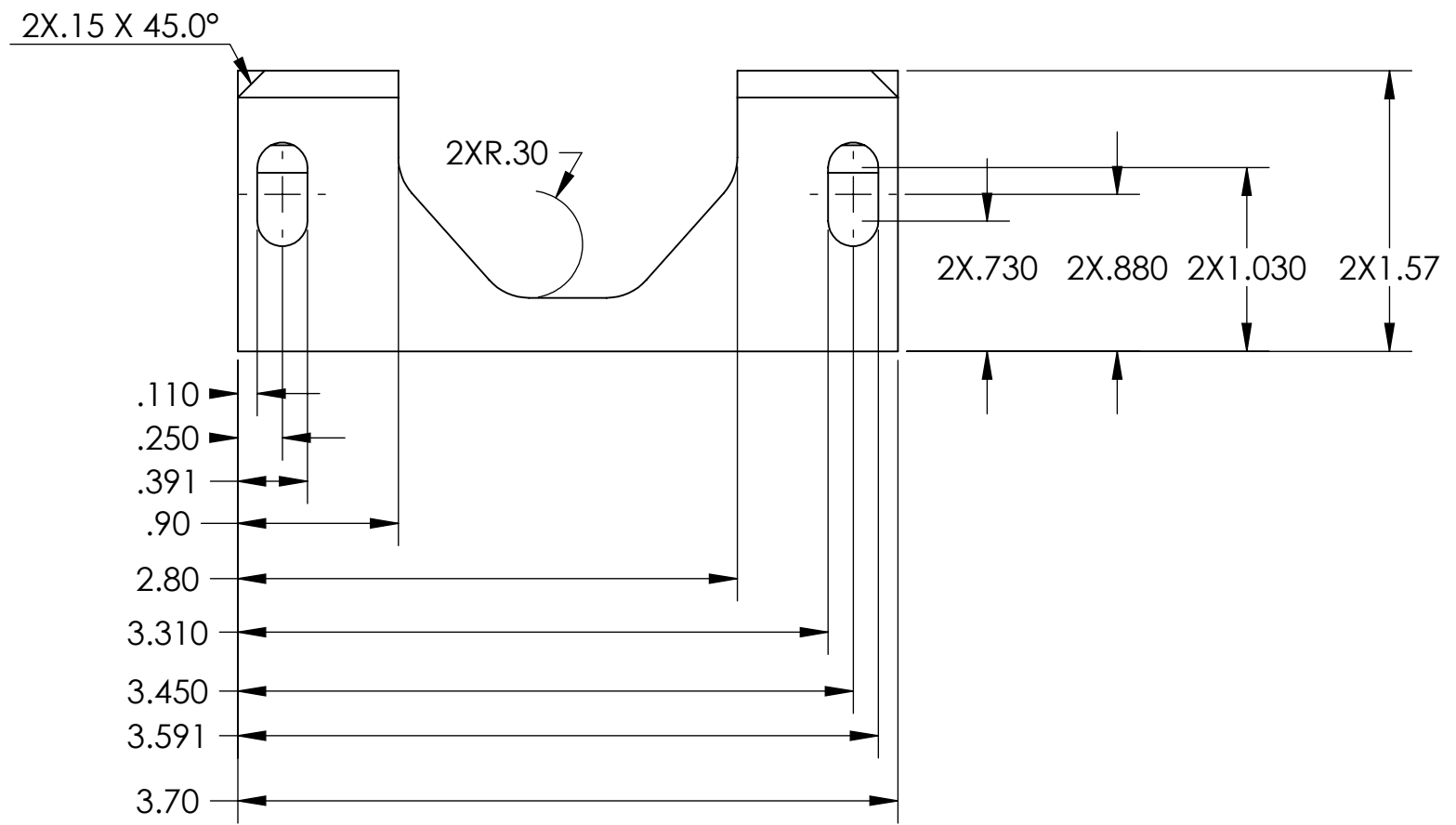
NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME			
DIMENSIONS ARE IN INCHES TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± 0.5°				1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, R.02 MIN. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		FM-BS VIBRATION ABSORBER MOUNTING PLATE			
						SYSTEM ADVANCED LIGO	SUB-SYSTEM SUS	DESIGNER K. BUCKLAND	13 AUG 2010
MATERIAL 6061-T6 Al		FINISH 63 μinch	NEXT ASSY D1002424		CHECKER F. MATCHARD	6 OCT 2010	SCALE: 1:1	PROJECTION:	SHEET 1 OF 1

D1002174.dwg, SUS, FM-BS VIBRATION ABSORBER MOUNTING PLATE, PART FDM REV. X.001, DRAWING FDM REV. X.002

D1002425 dLIGO, SUS, VIBRATION ABSORBER, 5LB CLAMP BASE, PART PDM REV: X-001, DRAWING PDM REV: X-002

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LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIZE	DWG. NO.	REV.
B	D1002425	v1
SCALE: 1:1	PROJECTION:	SHEET 2 OF 2

8 7 6 5 4 3 2 1

NOTES CONTINUED:

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

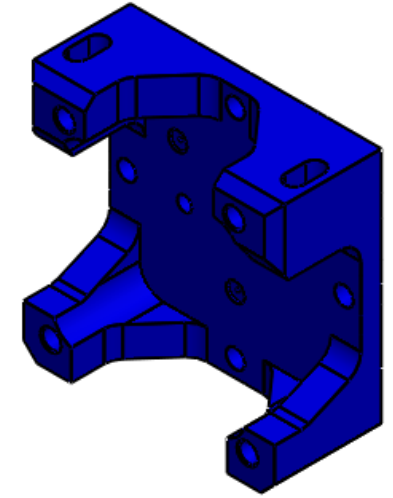
6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED (INCLUDED SANDING OR SCOURING FOR MATTE FINISH).

7. ALL PARTS TO BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATIONS E0900364.

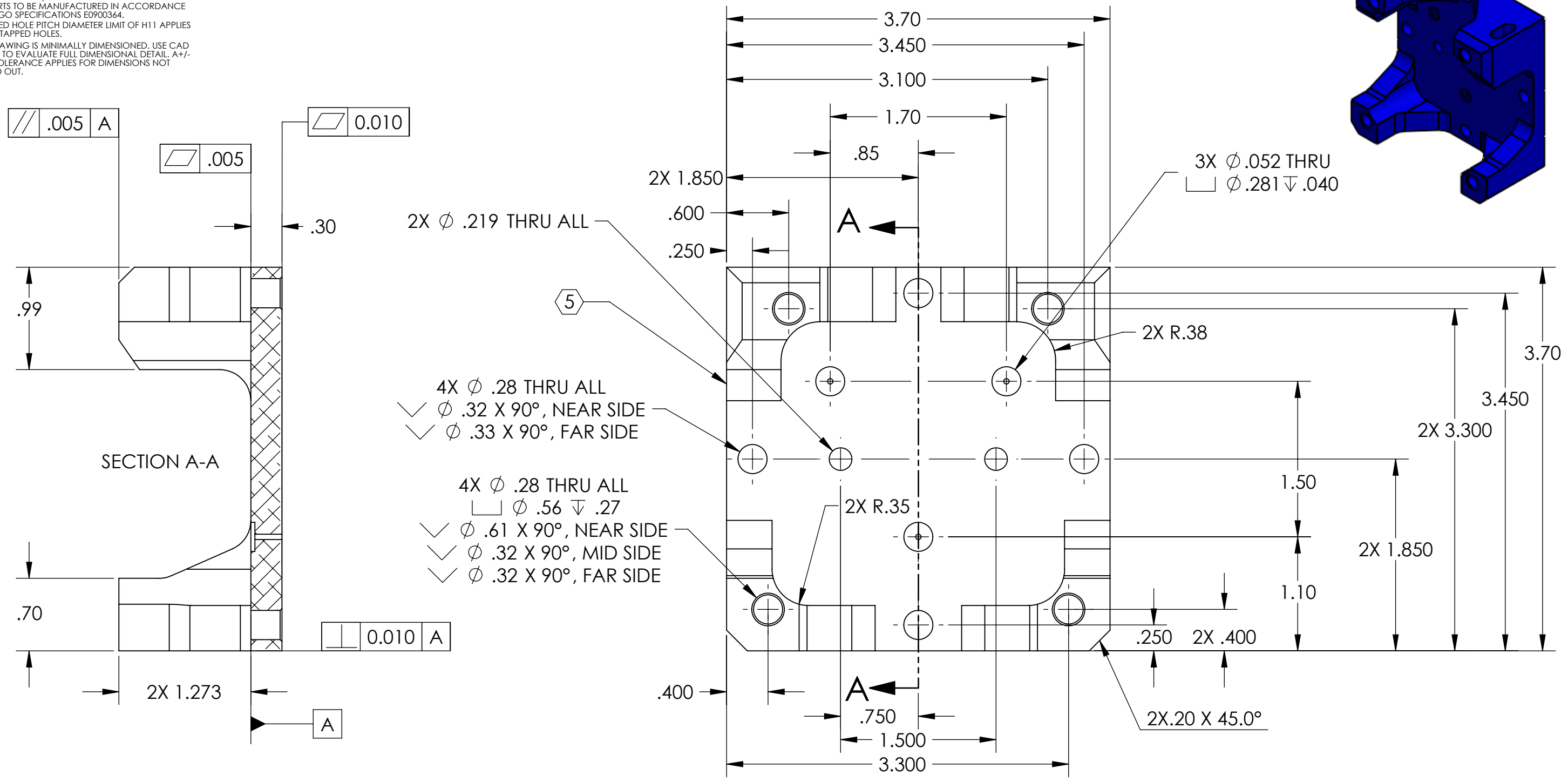
8. A TAPPED HOLE PITCH DIAMETER LIMIT OF H11 APPLIES TO ALL TAPPED HOLES.

9. THIS DRAWING IS MINIMALLY DIMENSIONED. USE CAD MODEL TO EVALUATE FULL DIMENSIONAL DETAIL. A+/- 0.015 TOLERANCE APPLIES FOR DIMENSIONS NOT CALLED OUT.

REV.	DATE	DCN #	DRAWING TREE #
V1	15 SEPT 2010	E1000493	-
			-
			-

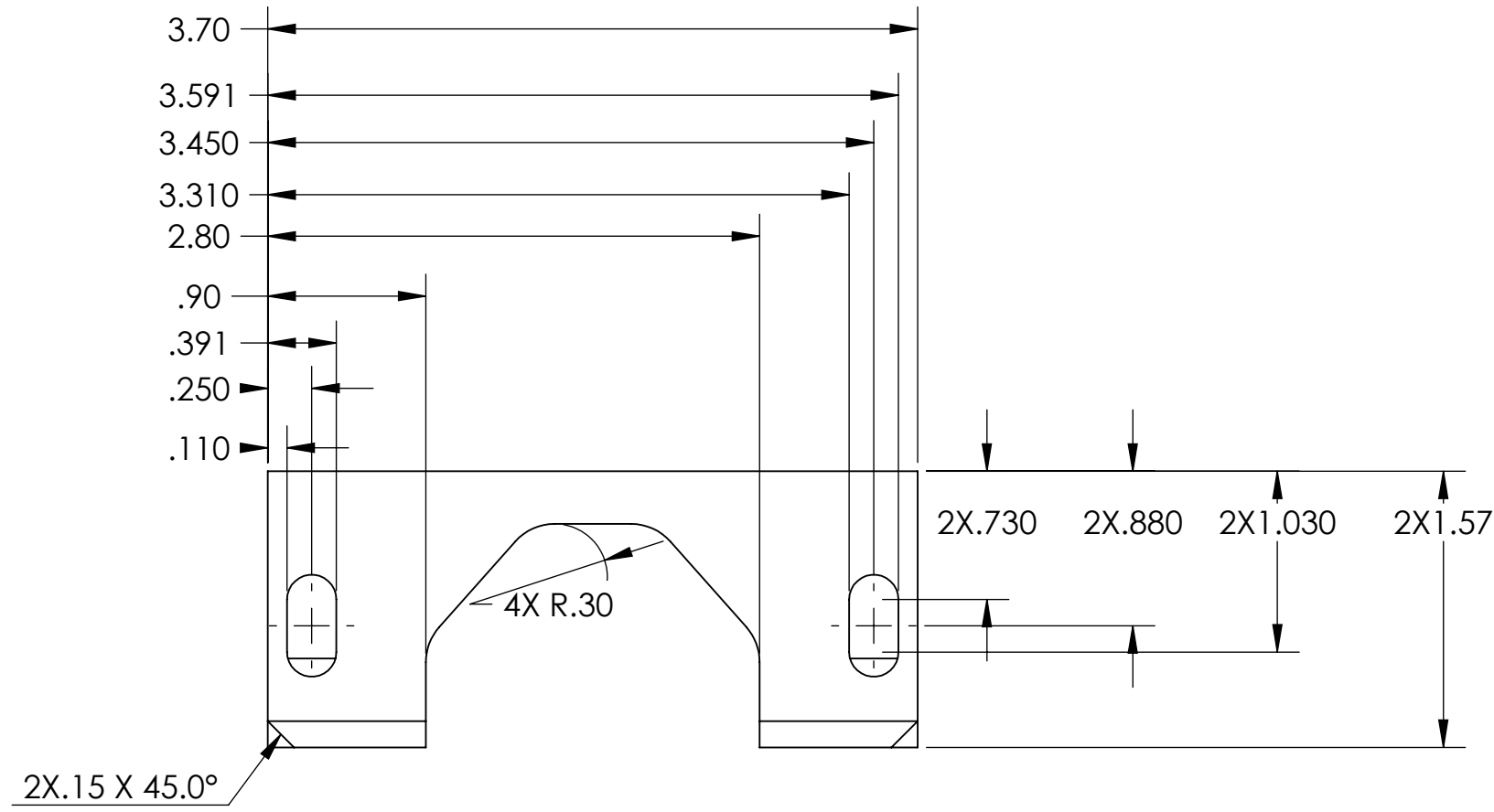




D1002426 cLIGO, SUS, VIBRATION ABSORBER, 5LB CLAMP TOP, PART PDM REV: X-001, DRAWING PDM REV: X-002



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				PART NAME	
DIMENSIONS ARE IN INCHES				Top Clamp for the SEI vibration absorber 5 Lb version	
TOLERANCES: .XX ± 0.015 .XXX ± 0.005				DESIGNER S. BISCANS 14 APR 2010	
ANGULAR ± 0.1°				DRAFTER K. BUCKLAND 15 SEPT 2010	
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.				CHECKER F. MATICHARD 5 OCT 2010	
MATERIAL 6061-T6 Al		FINISH 63 μ inch		APPROVAL C. TORRIE 5 OCT 2010	
SYSTEM ADVANCED LIGO		SUB-SYSTEM SEI		SIZE DWG. NO. B D1002426	
NEXT ASSY d1002424				SCALE: 1:1	
				PROJECTION:	
				SHEET 1 OF 2	

D1002426 dLIGO, SUS, VIBRATION ABSORBER, 5LB CLAMP TOP, PART PDM REV: X-001, DRAWING PDM REV: X-002

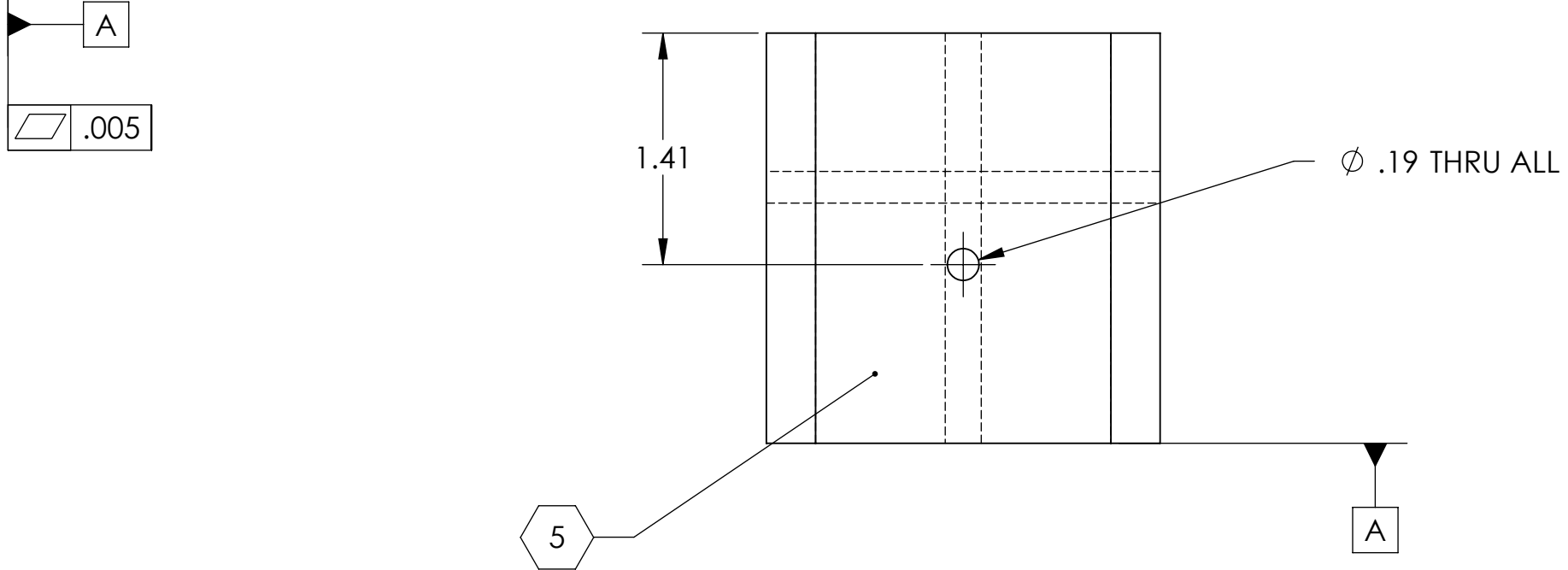
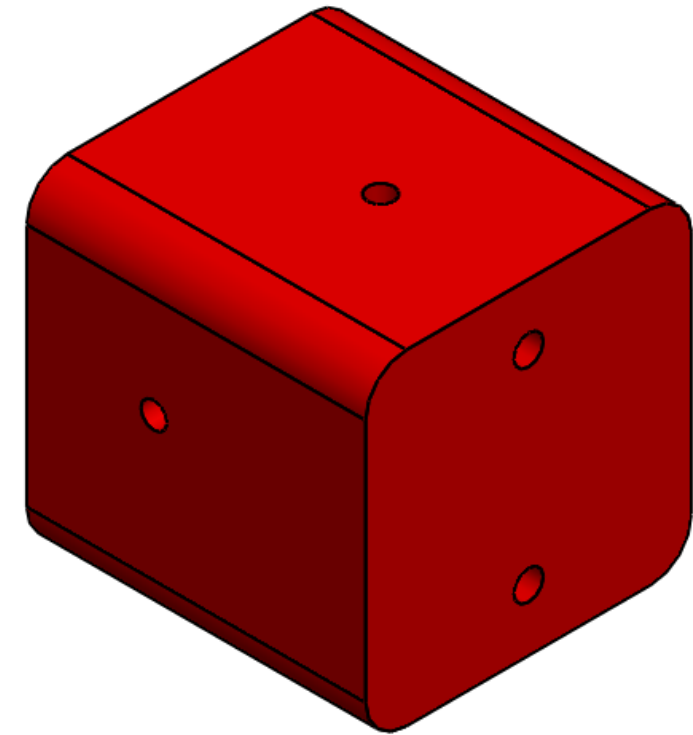
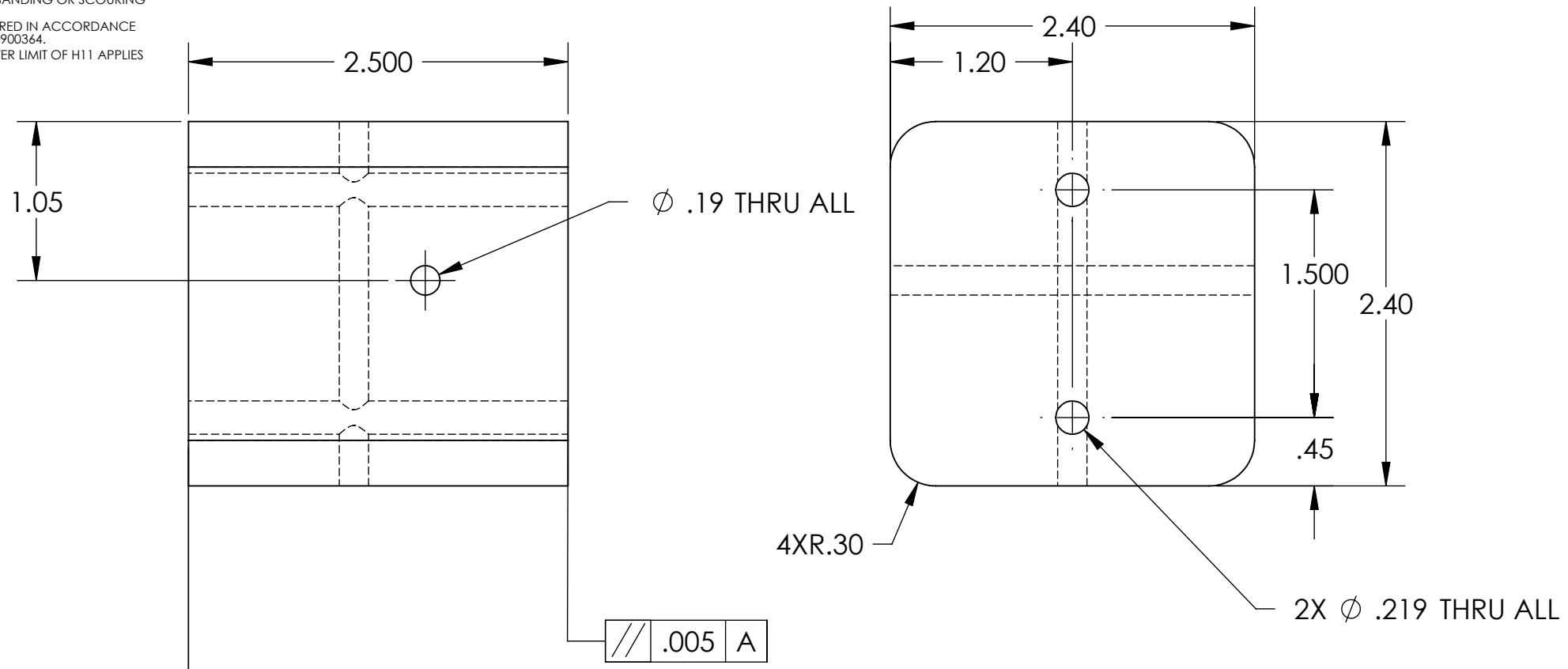


 CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE B	DWG. NO. D1002426
SCALE: 1:1	REV. v1
PROJECTION: 	SHEET 2 OF 2

D1002427 LIGO, SUS, VIBRATION ABSORBER, 5LB MASS, PART PDM REV: X-001, DRAWING PDM REV: X-002

- NOTES CONTINUED:**
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED (INCLUDED SANDING OR SCOURING FOR MATTE FINISH).
 7. ALL PARTS TO BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATIONS E0900364.
 8. A TAPPED HOLE PITCH DIAMETER LIMIT OF H11 APPLIES TO ALL TAPPED HOLES.

REV.	DATE	DCN #	DRAWING TREE #
v1	15 SEPT 2010	E1000493	-
-	-	-	-
-	-	-	-



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
DIMENSIONS ARE IN INCHES				ADVANCED LIGO		Mass for the SEI vibration absorbers 5 Lb	
TOLERANCES: .XX ± 0.015 .XXX ± 0.005				SUB-SYSTEM SEI		DESIGNER S.BISCANS 14 APR 2010	SIZE DWG. NO. B D1002427
ANGULAR ± 0.1°				MATERIAL 304, 316 OR 302 SSSL FINISH 63 µinch		DRAFTER K. BUCKLAND 15 SEPT 2010	REV. v1
				NEXT ASSY D1002424		CHECKER	SCALE: 1:1 PROJECTION: SHEET 1 OF 1
						APPROVAL	

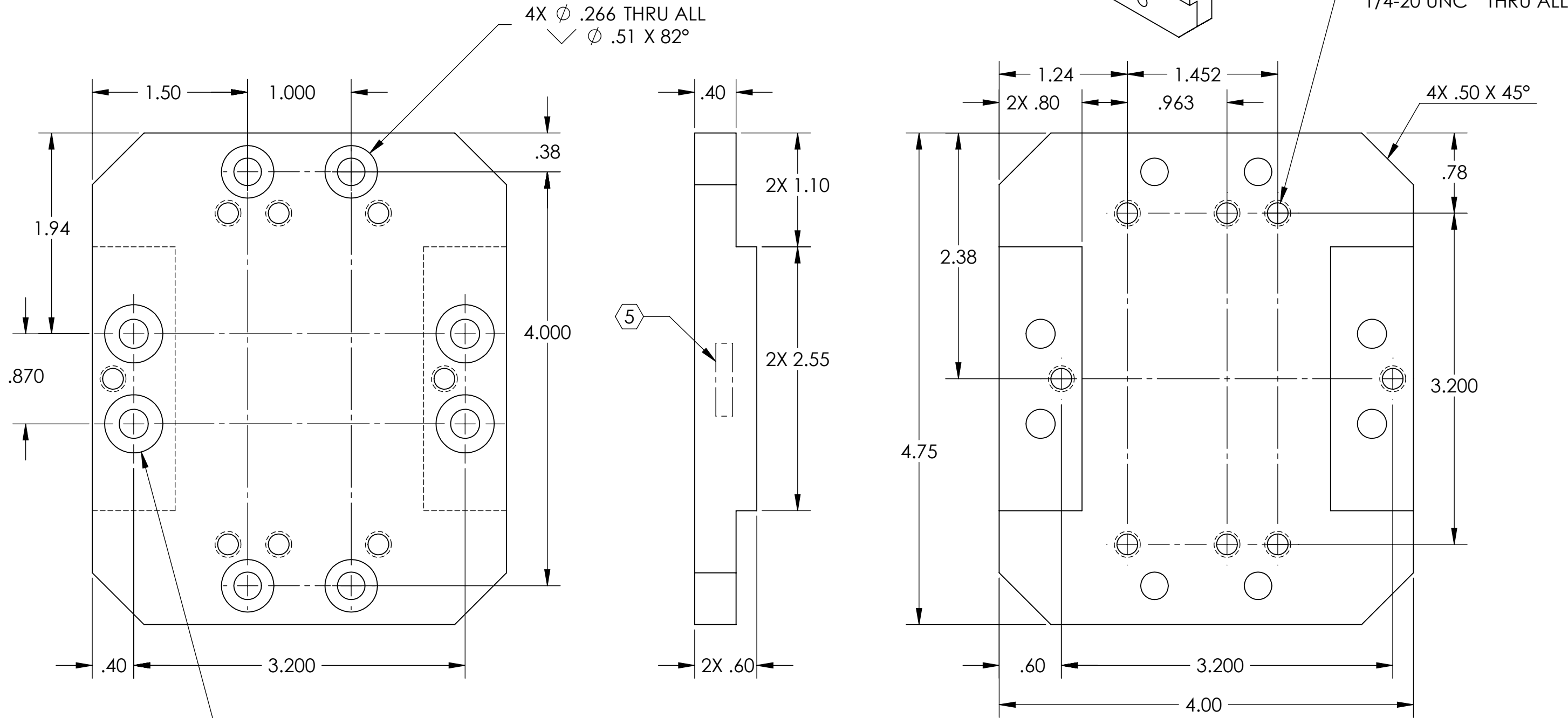
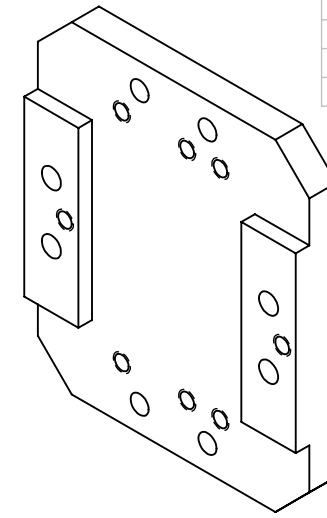
D1002594 QUGO, SUS, UPPER QUAD VIBRATION ABSORBER MOUNTING PLATE, PART PDM REV: X-001, DRAWING PDM REV: X-001

8 7 6 5 4 3 2 1

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

- 6. APPROXIMATE WEIGHT = X.XXX 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.
- 9. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4
- 10. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL. AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS.

REV.	DATE	DCN #	DRAWING TREE #
V1	6 OCT 2010	E1000493	
V2	15 NOV 2010	E1000698	



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

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

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

MATERIAL		FINISH		NEXT ASSY		PART NAME	
6061-T6 Al		63 μ inch		D1002424		UPPER QUAD VIBRATION ABSORBER MOUNTING PLATE	

SYSTEM	ADVANCED LIGO	SUB-SYSTEM	SUS	DESIGNER	K. BUCKLAND	6 OCT 2010	SIZE	DWG. NO.	REV.
DRAFTER		CHECKER		APPROVAL			B	D1002594	v2

SCALE: 1:1 PROJECTION: SHEET 1 OF 1

8 7 6 5 4 3 2 1

8

7

6

5

4

3

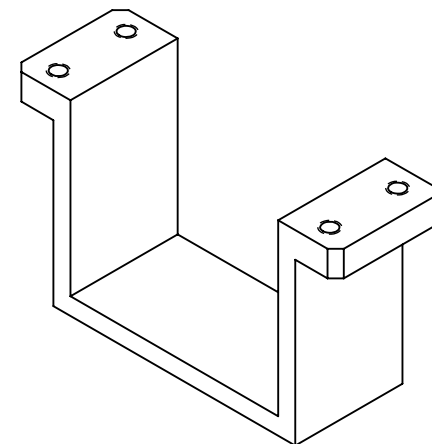
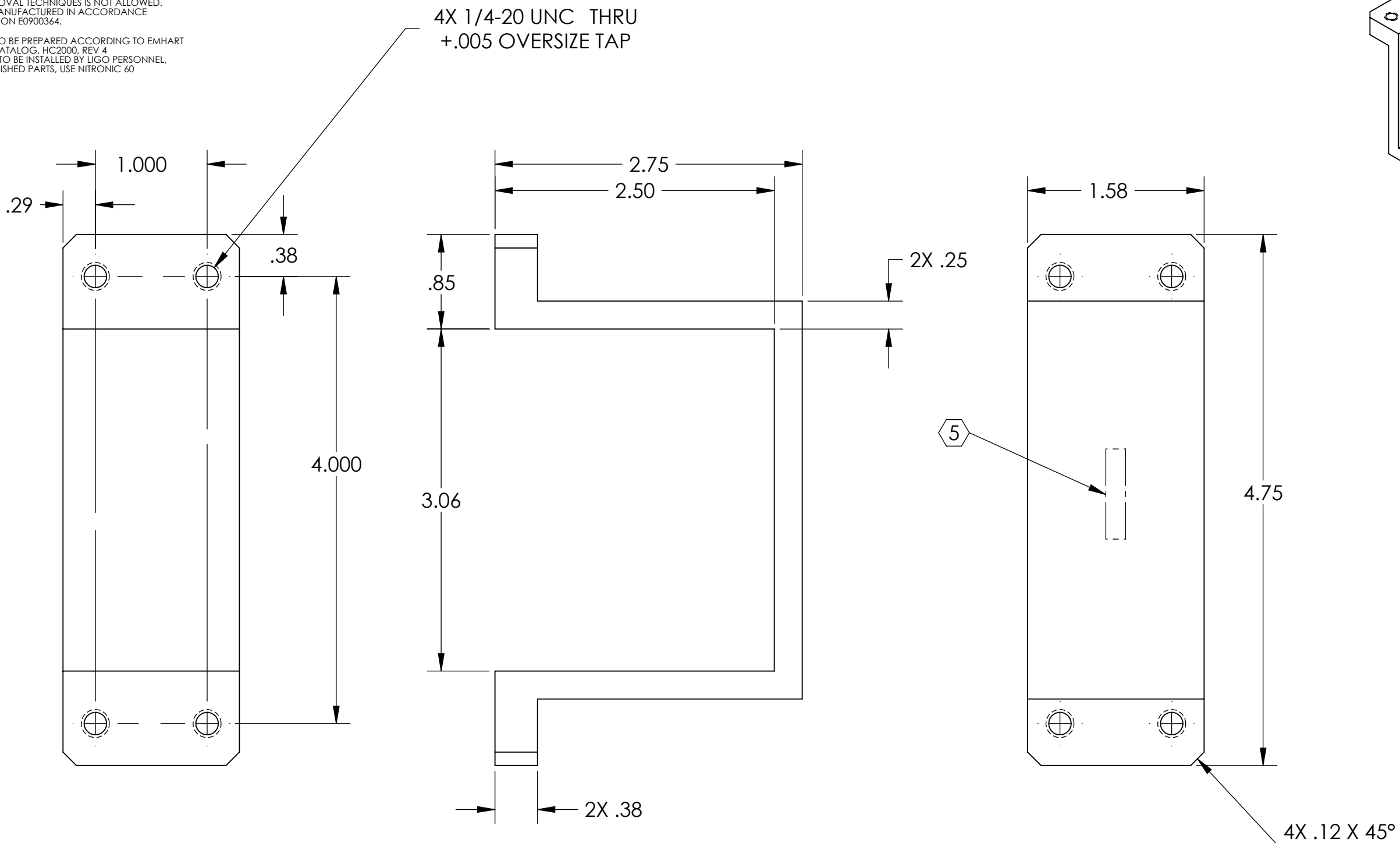
2

1

NOTES CONTINUED:

- 5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED.
EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
- 6. APPROXIMATE WEIGHT = X.XXX 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.
- 9. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4
- 10. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL. AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS.

REV.	DATE	DCN #	DRAWING TREE #
V1	6 OCT 2010	E1000493	



D1002597 QUGO, SUS, UPPER QUAD VIBRATION ABSORBER CLAMP, PART PDM REV: X-000, DRAWING PDM REV: X-004

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

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
ADVANCED LIGO		CLAMP, VIBRATION ABSORBER, UPPER QUAD	
SYSTEM	SUB-SYSTEM	DESIGNER	DATE
	SUS	K. BUCKLAND	6 OCT 2010
CHECKER	APPROVAL	DRAWN	DATE
		K. BUCKLAND	6 OCT 2010
NEXT ASSY		SIZE	DWG. NO.
D1002424		B	D1002597
		SCALE	PROJECTION
		1:1	AS SHOWN
		SHEET 1 OF 1	

8

7

6

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4

3

2

1