

NOTES CONTINUED:

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

6. APPROXIMATE WEIGHT = SEE FIELD OF DRAWING.

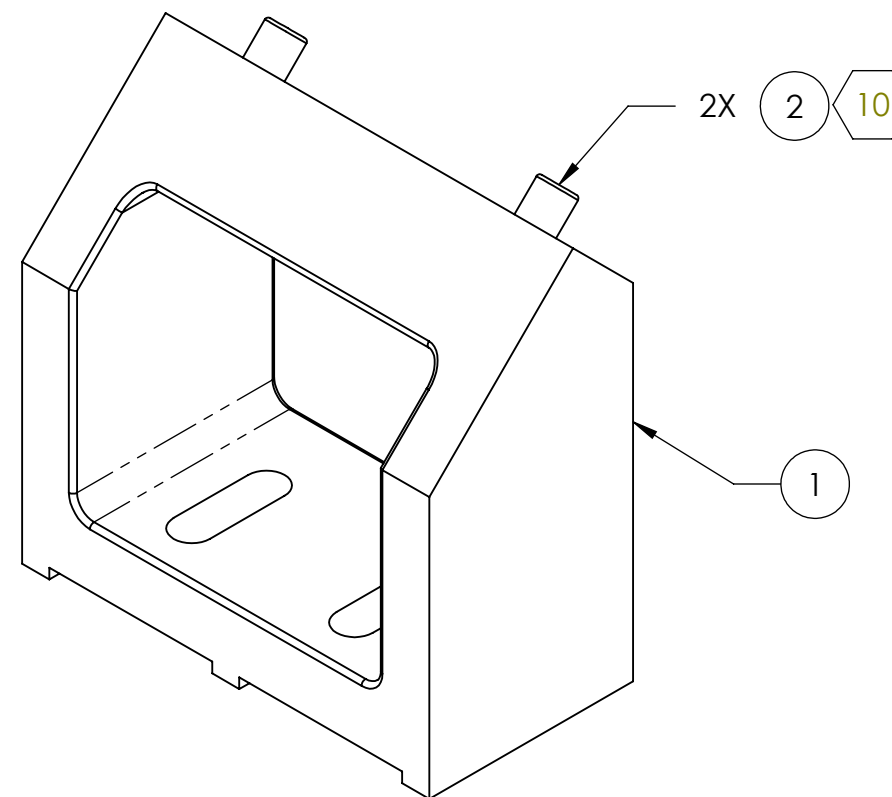
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

8. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED. REFER TO LIGO-E0900364

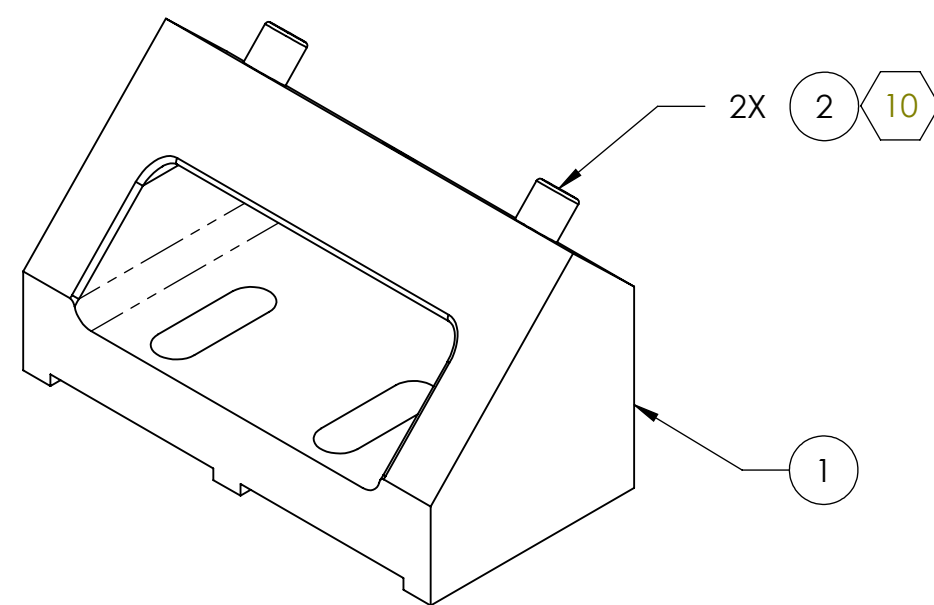
9. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS, PLUGS OR RECYCLED MATERIAL). NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. REFER TO LIGO-E0900364.

⑩ DOWEL PINS TO BE INSTALLED BY LIGO PERSONEL, AFTER DELIVERY OF FINISHED PARTS.

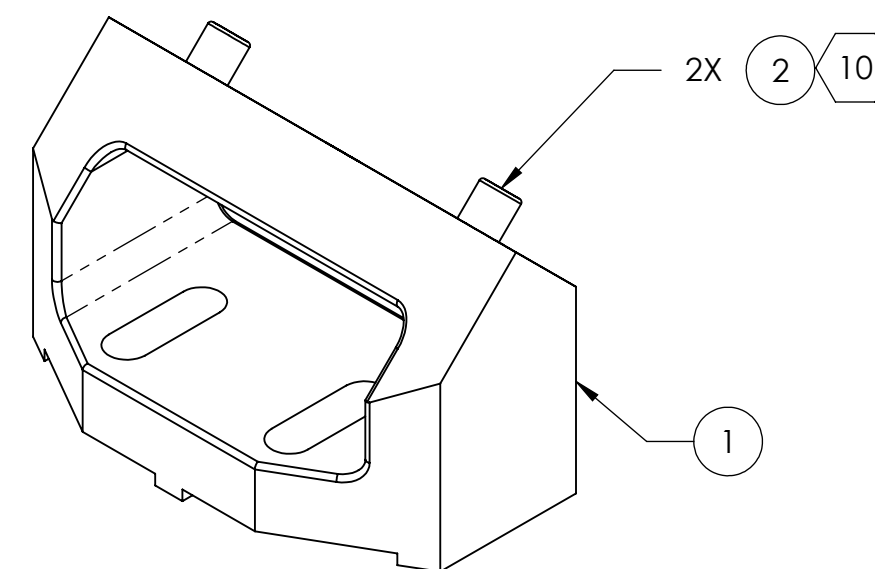
REV.	DATE	DCN #	DRAWING TREE #
V1	25 OCT 2012	E1200963-V1	
V2	28 NOV 2012	E1200963-V2	



**D1200173-1**  
WEIGHT: .48 LBS



**D1200173-2**  
WEIGHT: .12 LBS



**D1200173-3**  
WEIGHT: .10 LBS

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	SUPPLIER
2	2	90145A505	HDW, PIN, DOWEL, .188DIA X .50LG, SST	MCMMASTER-CARR
1	1	D1200173-X	αLIGO, PCAL, MIRROR MOUNT BASE, ETM CAMERA	

PARTS LIST

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, .005-.015.
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**  
AL ALLOY 6061-T6

**FINISH**  
63 μinch

**LIGO** CALIFORNIA INSTITUTE OF TECHNOLOGY  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

**SYSTEM**  
ADVANCED LIGO

**SUB-SYSTEM**  
AOS

**NEXT ASSY**  
D1200174

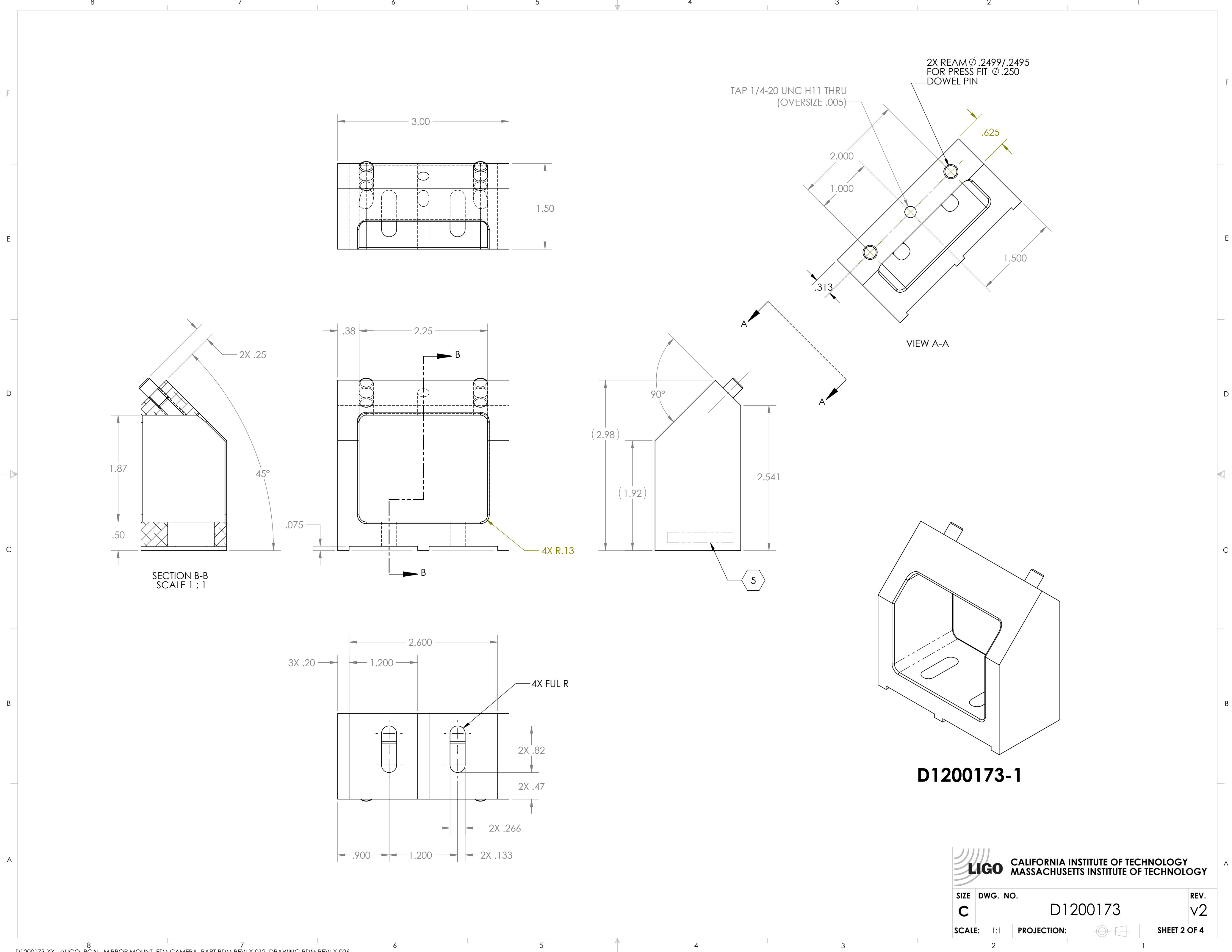
**PART NAME**  
αLIGO, PCAL, MIRROR MNT BASE, CAMERA

<b>DESIGNER</b>	S. SHANKLE	13 OCT 2012	<b>SIZE</b>	<b>DWG. NO.</b>	<b>REV.</b>
<b>DRAFTER</b>	S. SHANKLE	13 OCT 2012	c	D1200173	v2
<b>CHECKER</b>	S. SHANKLE	13 OCT 2012			
<b>APPROVAL</b>	S. SHANKLE	13 OCT 2012	<b>SCALE:</b> 1:1	<b>PROJECTION:</b>	SHEET 1 OF 4

DIMENSIONS ARE IN INCHES

TOLERANCES:  
.XX ± .10  
.XXX ± .005



ANGULAR ± 0.5°

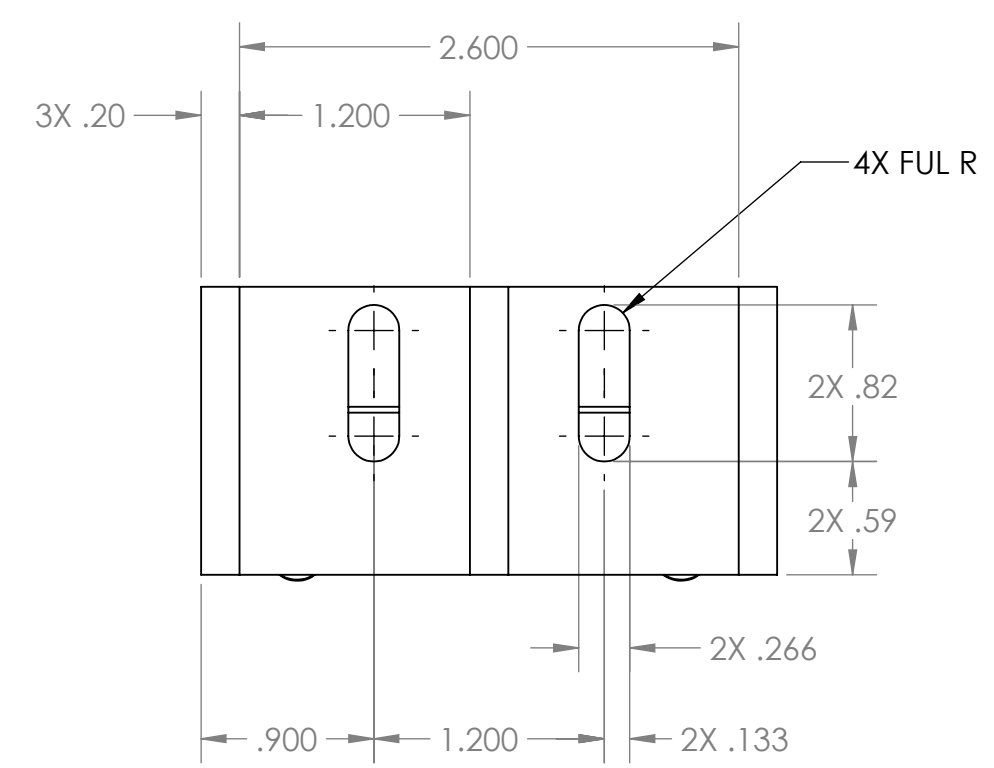
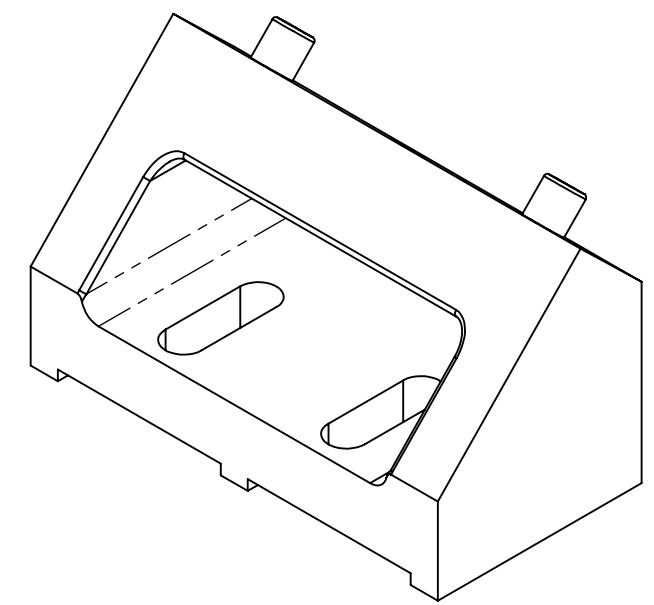
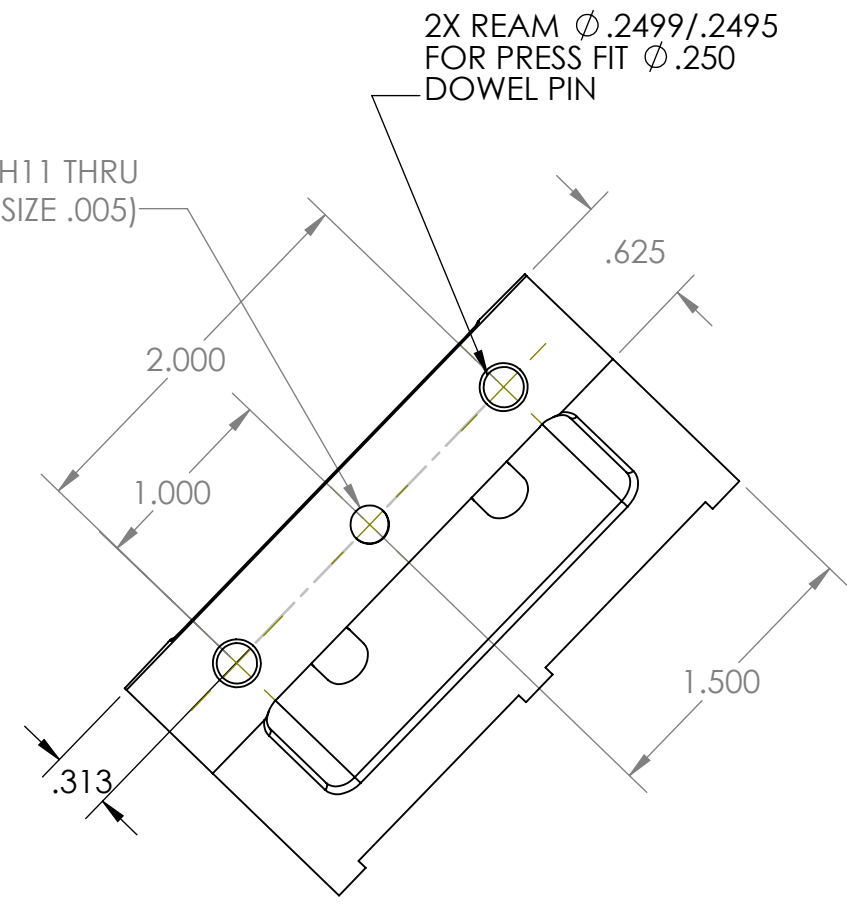
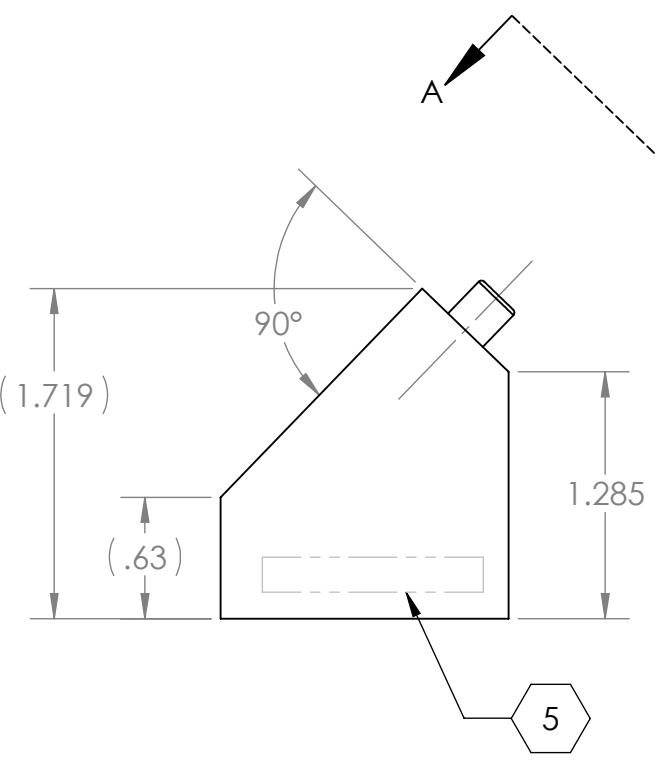
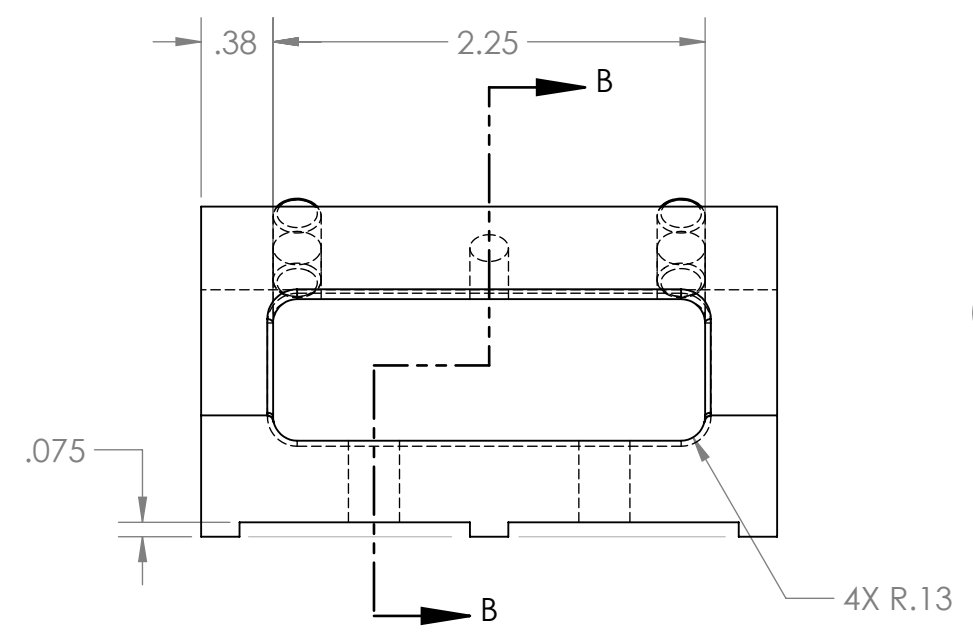
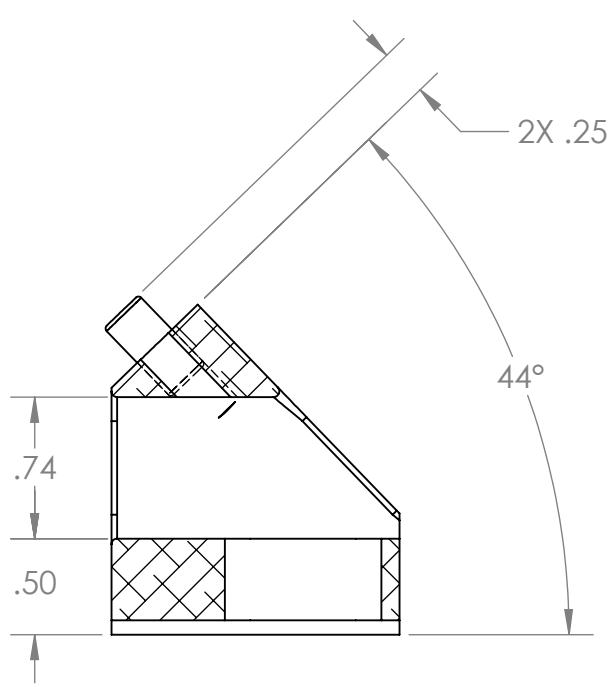
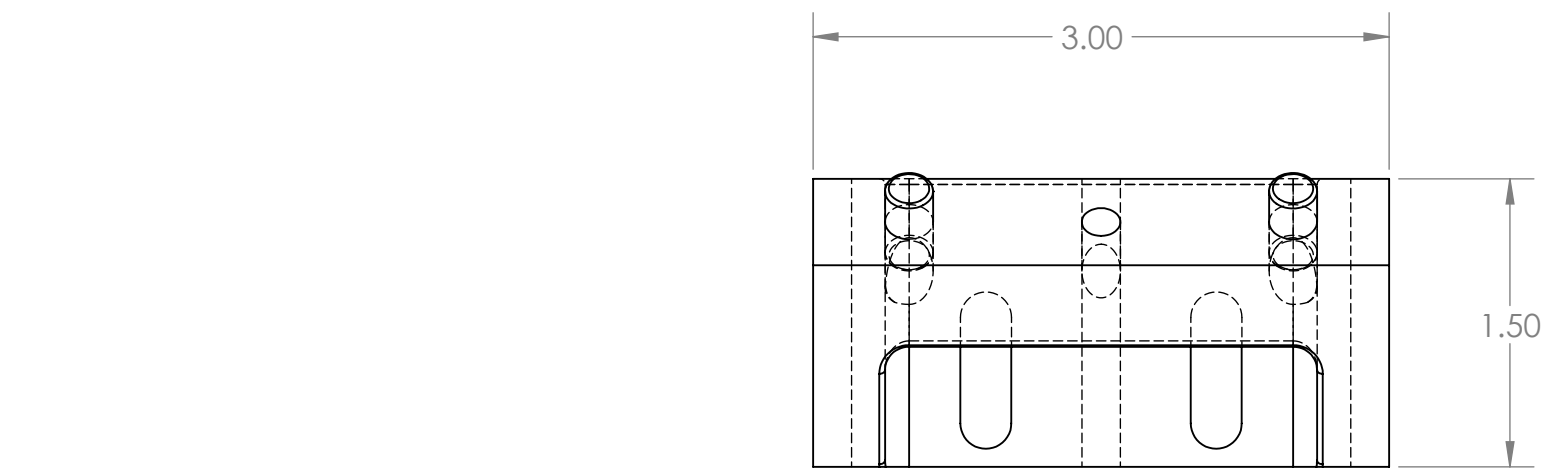


SECTION B-B  
SCALE 1:1



VIEW A-A

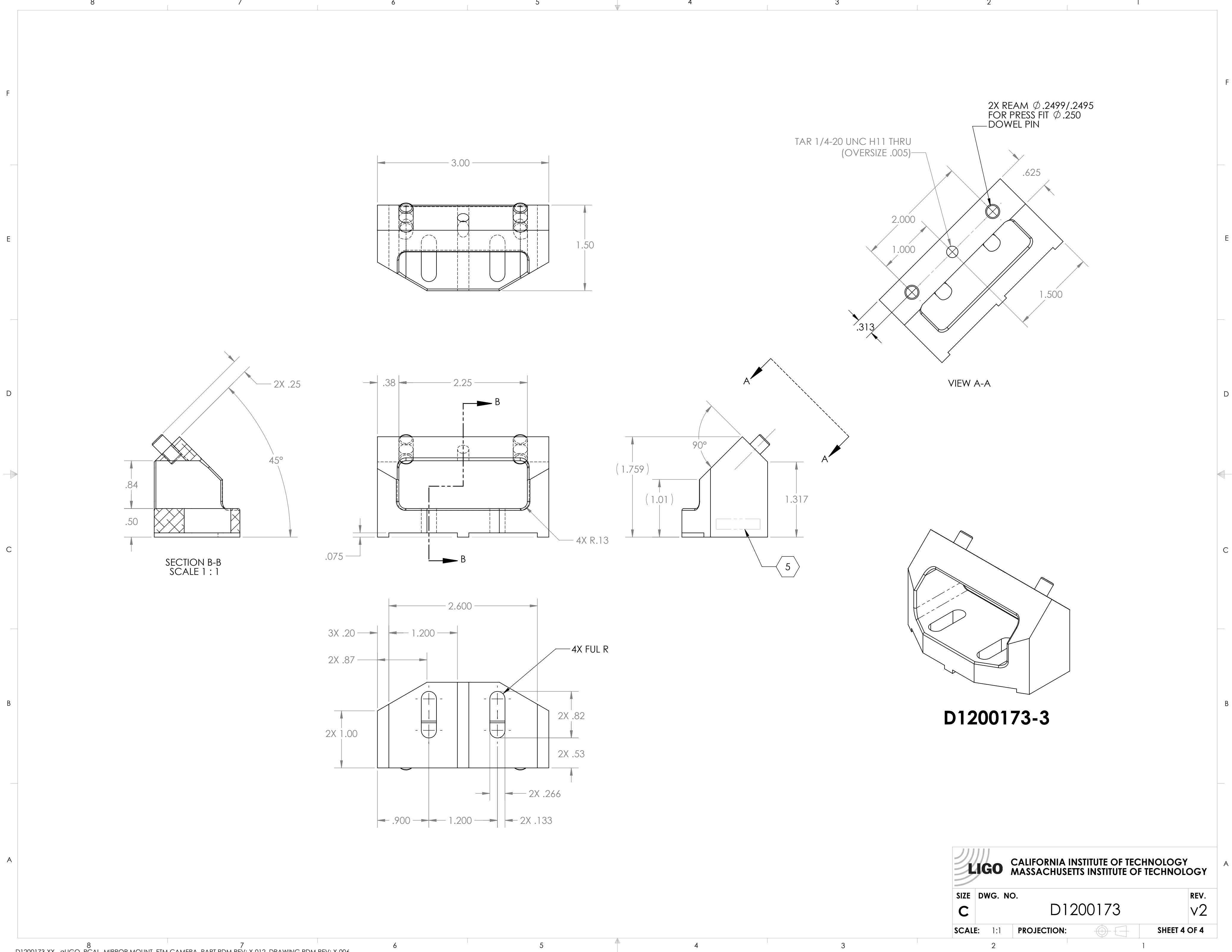
**D1200173-1**

 <b>CALIFORNIA INSTITUTE OF TECHNOLOGY</b> <b>MASSACHUSETTS INSTITUTE OF TECHNOLOGY</b>		
SIZE <b>C</b>	DWG. NO. <b>D1200173</b>	REV. <b>v2</b>
SCALE: 1:1	PROJECTION: 	SHEET 2 OF 4



**D1200173-2**

 <b>CALIFORNIA INSTITUTE OF TECHNOLOGY</b> <b>MASSACHUSETTS INSTITUTE OF TECHNOLOGY</b>		
SIZE <b>C</b>	DWG. NO. <b>D1200173</b>	REV. <b>v2</b>
SCALE: 1:1	PROJECTION: 	SHEET 3 OF 4




2X REAM  $\phi$ .2499/.2495  
FOR PRESS FIT  $\phi$ .250  
DOWEL PIN

TAR 1/4-20 UNC H11 THRU  
(OVERSIZE .005)

VIEW A-A

SECTION B-B  
SCALE 1:1

**D1200173-3**

 <b>CALIFORNIA INSTITUTE OF TECHNOLOGY</b> <b>MASSACHUSETTS INSTITUTE OF TECHNOLOGY</b>		
SIZE <b>C</b>	DWG. NO. <b>D1200173</b>	REV. <b>v2</b>
SCALE: 1:1	PROJECTION:	SHEET 4 OF 4