

8

7

6

5

4

3

2

1

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

6. MASS: 0.789 LB [0.358 KG].

7. FROM STATEMENT OF WORK C1200457-v3:

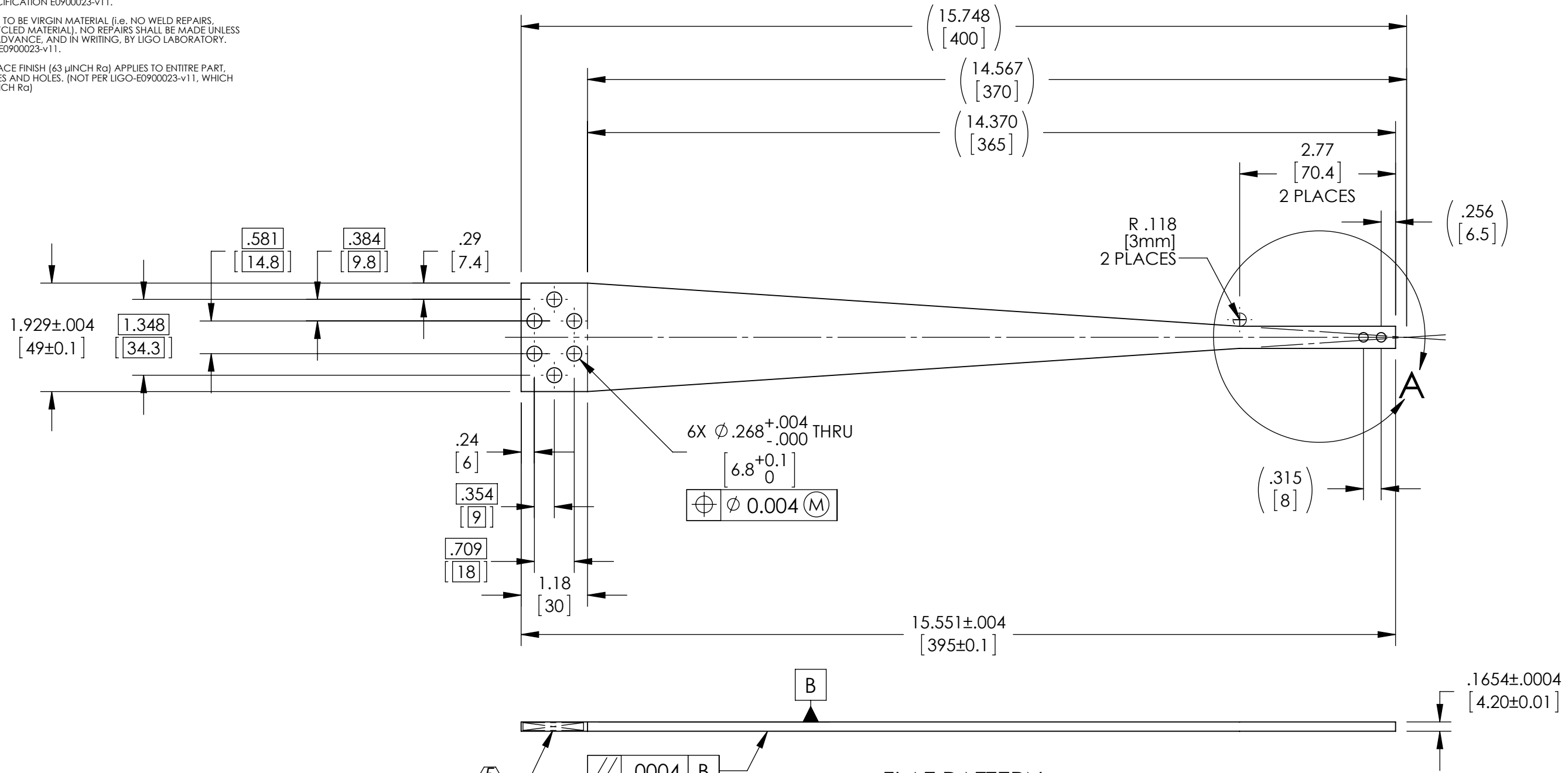
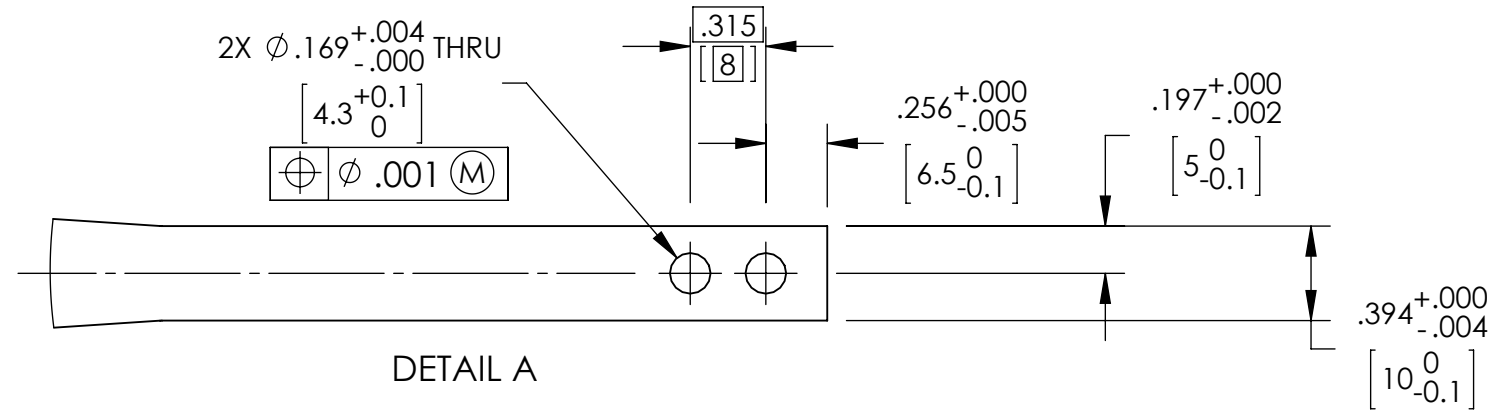
ALL PARTS ARE TO BE MANUFACTURED IN STRICT ACCORDANCE WITH LIGO SPECIFICATION E0900023-v11 AND ALL ADDITIONAL REQUIREMENTS OF THIS SOW. MANUFACTURER IS RESPONSIBLE FOR ALL SUB-CONTRACTORS' CONFORMANCE TO LIGO SPECIFICATION E0900023-v11 WHEREVER APPLICABLE, INCLUDING HANDLING AND PROTECTION OF PARTS, AND TO ALL ADDITIONAL APPLICABLE REQUIREMENTS OF THIS SOW.

PARTS ARE 'THIN' CURVED SPRINGS AS DESCRIBED IN SECTION 2.2 OF LIGO SPECIFICATION E0900023-v11.

8. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS, PLUGS OR RECYCLED MATERIAL). NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. REFER TO LIGO-E0900023-v11.

9. SPECIFIED SURFACE FINISH (63 μINCH Ra) APPLIES TO ENTIRE PART, INCLUDING SIDES AND HOLES. (NOT PER LIGO-E0900023-v11, WHICH SPECIFIES 32 μINCH Ra)

REV.	DATE	DCN #	DRAWING TREE #
v1	03 FEB 2012	-	-
v2	28 FEB 2012	E1200070	-
-	-	-	-



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN MILLIMETERS

TOLERANCES:  
 .XX ± .01  
 .XXX ± .005  
 ANGULAR ± 0.5°

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

MATERIAL: MARAGING STEEL C250  
 FINISH: 63 μinch Ra (9)

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME <b>αLIGO TMS LOWER STAGE BLADE SPRING</b>	
SYSTEM <b>ADVANCED LIGO</b>	SUB-SYSTEM <b>SUS</b>	DESIGNER C. CONLEY	DATE 23 JAN 2012
NEXT ASSY <b>D1200525</b>	CHECKER SEE DCN	DRAFTER K MAILAND	DATE 28 FEB 2012
APPROVAL SEE DCN		SIZE <b>B</b>	DWG. NO. <b>D1200117</b>
SCALE: NONE		PROJECTION:	REV. <b>v2</b>
SHEET 1 OF 2			SHEET 1 OF 2

D1200117 αLIGO TMS Lower Stage Blade Spring, PART PDM REV: X-016, DRAWING PDM REV: X-003

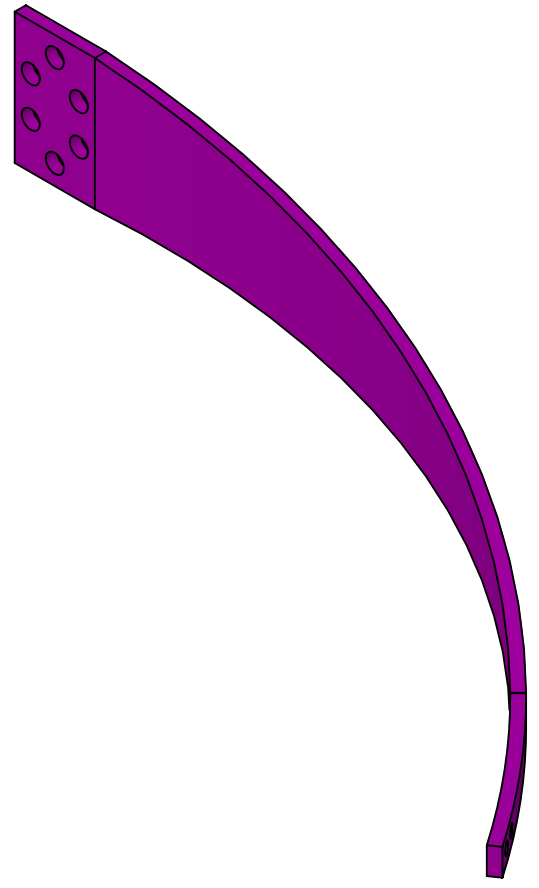
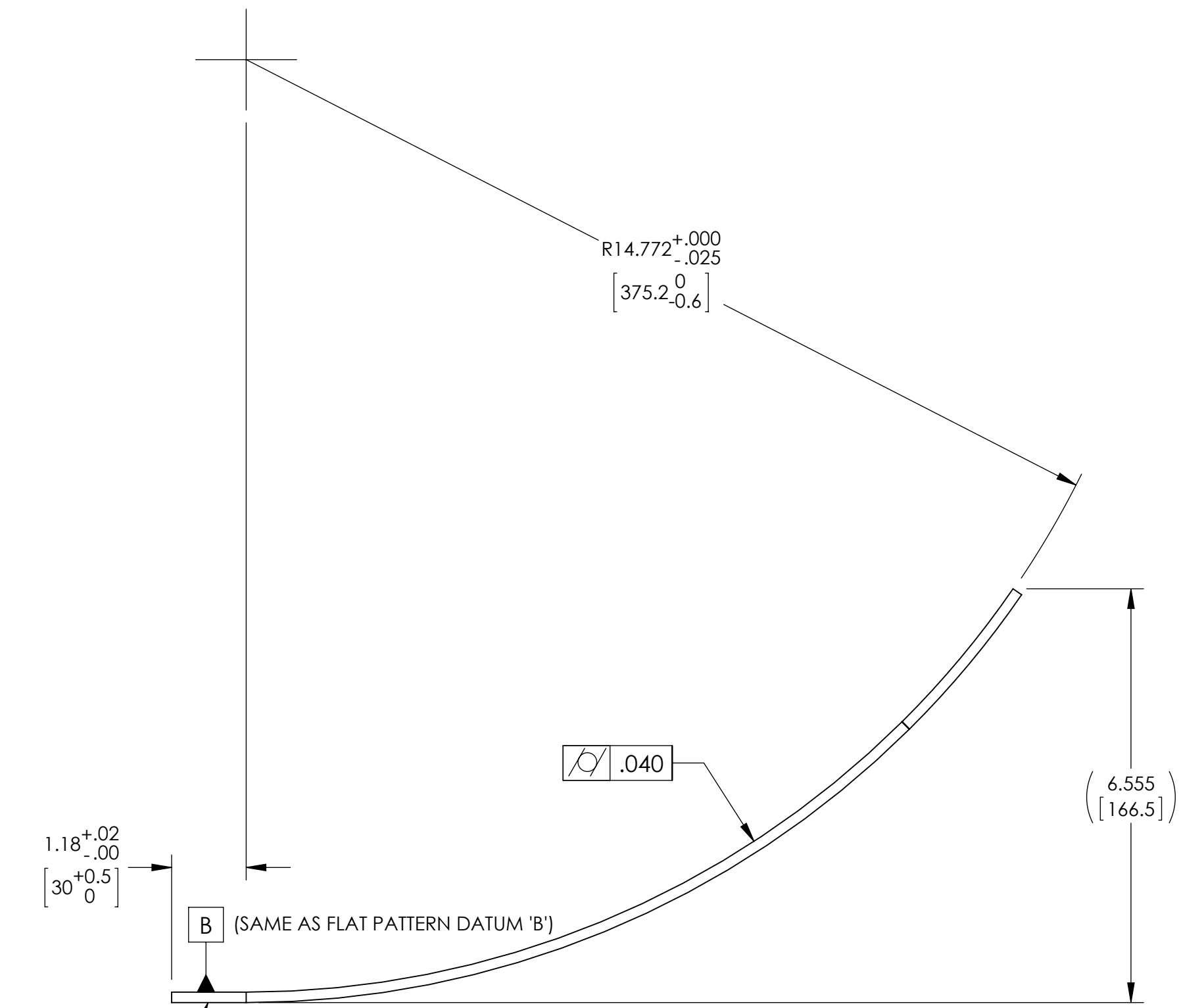
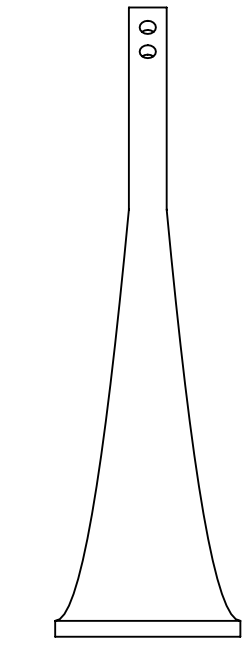
8 7 6 5 4 3 2 1

D1200117 aLIGO TMS Lower Stage Blade Spring, PART PDM REV: X-016, DRAWING PDM REV: X-003

TOTAL SUSPENDED MASS ON BLADE: 22 KG

D  
C  
B  
A

D  
C  
B  
A



FORMED BLADE SPRING

		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
SIZE	DWG. NO.	REV.	
B	D1200117	v2	
SCALE: NONE	PROJECTION:	SHEET 2 OF 2	

8 7 6 5 4 3 2 1