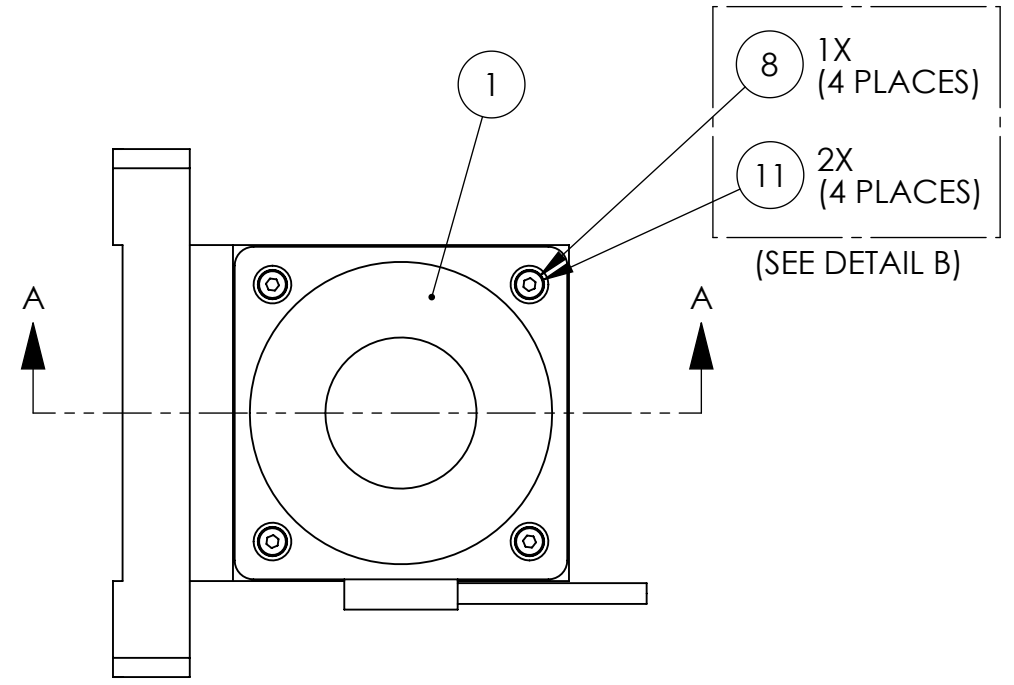
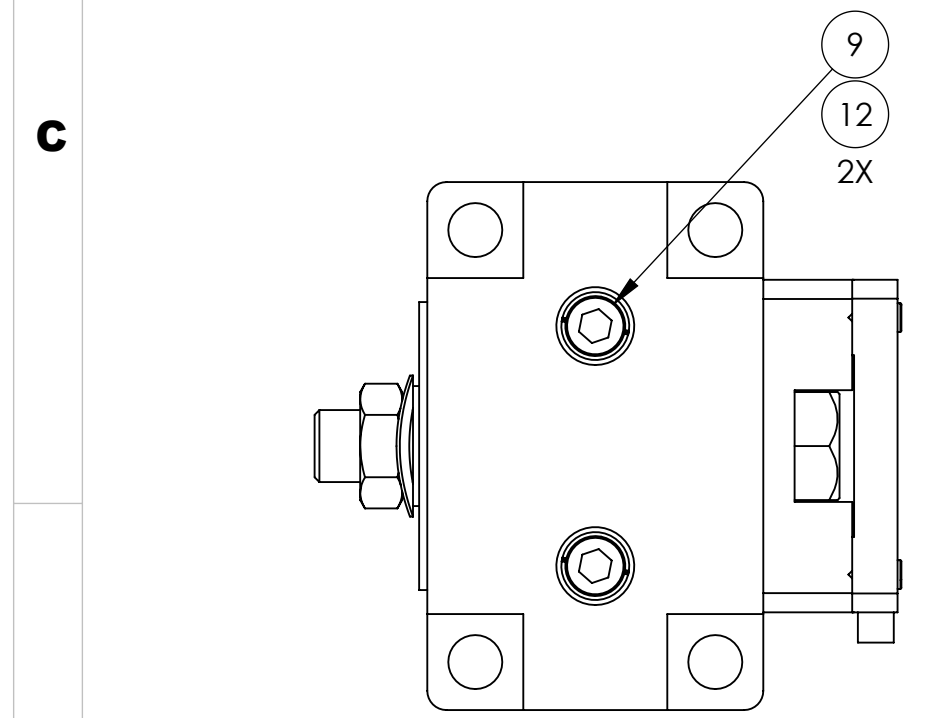
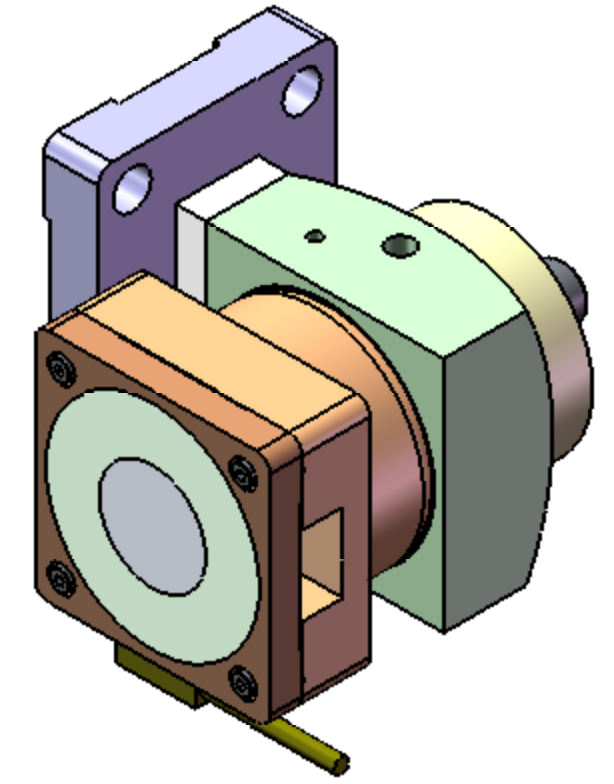
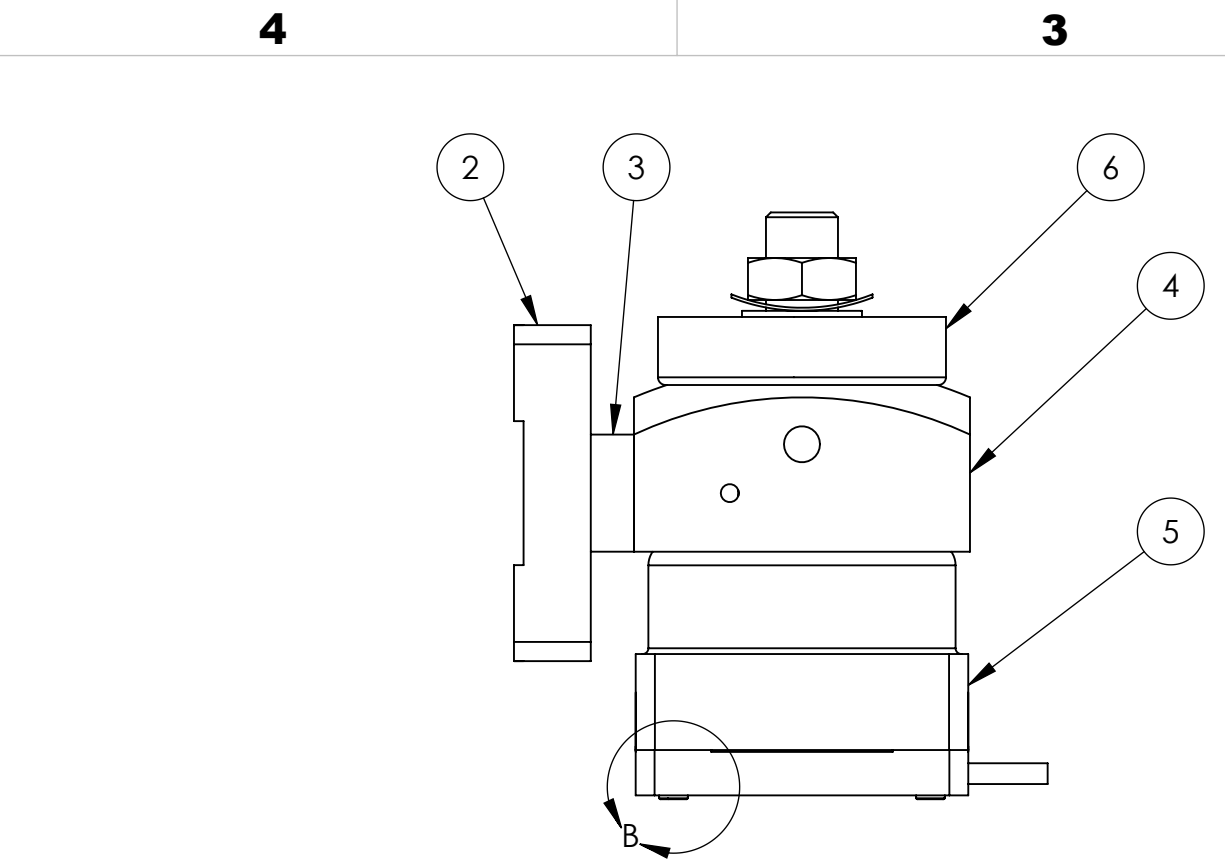
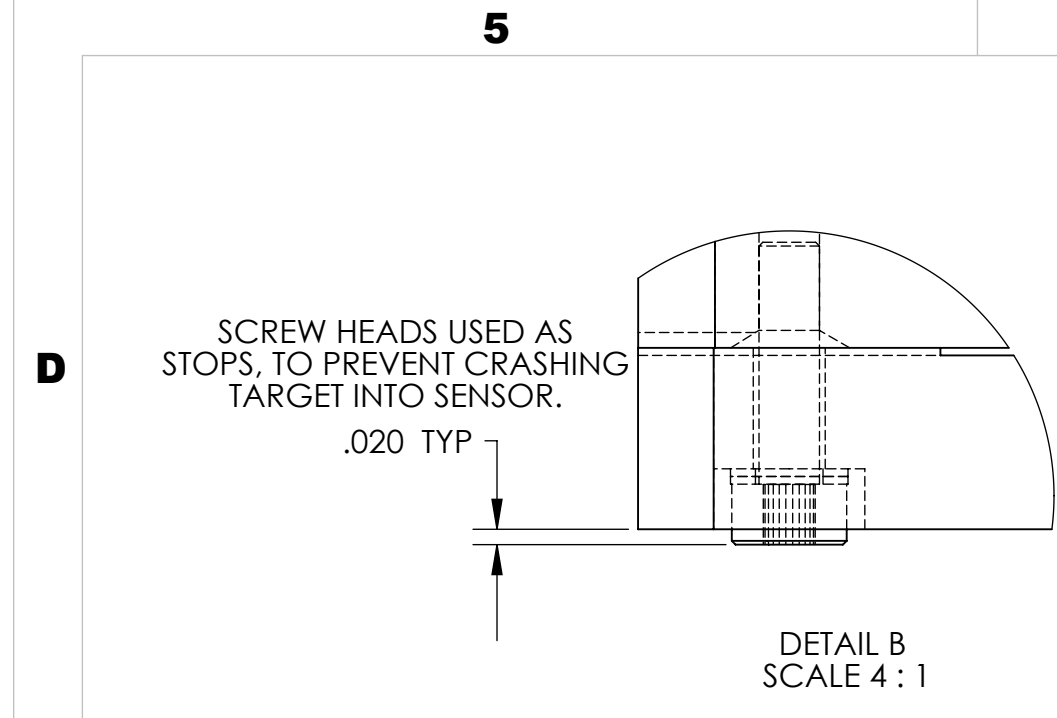


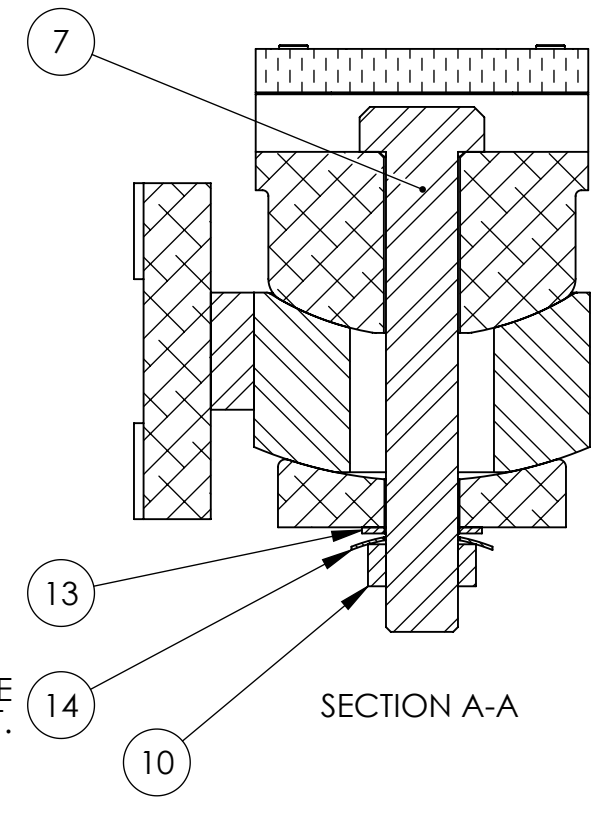
REVISION HISTORY				
REV	DATE	ECO	APPROVAL	DESCRIPTION
B	6/2/2007	1064	B. Schiffner	Manufacturing Release
C	01/24/2008	-	A. STEIN	Added detail. Updated BOM.



NOTES:

- SEE E070154 (ADVANCED LIGO SINGLE STAGE HAM VIBRATION ISOLATION TABLE ASSEMBLY PROCEDURE) FOR ADDITIONAL ASSEMBLY NOTES AND REQUIREMENTS.
- SENSORS ARE FRAGILE. HANDLE WITH CARE.

BILL OF MATERIALS					
ITEM NO.	Horizontal/ QTY.	PART NUMBER	DESCRIPTION	CONFIG DESCRIPTION	MATERIAL
1	1	ADE 2822-V	CAPACITIVE POSITION SENSOR	20mm PROBE, VACUUM-COMPATIBLE	CERAMIC, ...
2	1	D071164	SENSOR HEAD BASE PLATE	-	6061-T6
3	1	D071170	SENSOR HEAD STANDOFF, HORIZ	-	6061-T6
4	1	D071163	SENSOR HEAD MOUNT	-	6061-T6
5	1	D071161	SENSOR HEAD BASE	-	6061-T6
6	1	D071162	SENSOR HEAD WASHER	-	6061-T6
7	1	MCMaster 92198A634	HHCS	3/8"-16x2.5"	18-8 SS
8	4	MCMaster 91292A008	SHCS	M2-.4x8mm	18-8 SS
9	2	HOLOKROME 79024	SHCS	#10-32x.75"	18-8 SS
10	1	MCMaster 91847A031	HEX JAM NUT	3/8"-16	18-8 SS
11	8	MCMaster 93574A161	PRECISION WASHER	.088"IDx.153"ODx.010"	18-8 SS
12	2	UCC WFV-10	VENTED WASHER	.195"IDx.354"OD	18-8 SS
13	1	MCMaster 98017A199	FLAT WASHER	.390"IDx.625"ODx.032"	18-8 SS
14	1	MCMaster 9716K53	CURVED SPRING WASHER	.395"IDx.735"ODx.016"	301 SS



SPRING WASHER PROVIDES ADJUSTABLE TENSION DURING SENSOR ALIGNMENT.

**UNLESS OTHERWISE SPECIFIED:**  
 DIMENSIONS ARE IN INCHES  
 DECIMAL TOLERANCES:  
 .XX ±.015 .XXX ±.005  
 ANG TOL: ± 1° SURFACE ROUGHNESS: 63

**High Precision Devices**  
 1668 Valtec Lane, Suite C, Boulder, Colorado 80301  
 Phone: (303) 447-2558 Fax: (303) 447-2548 Web Site: www.hpd-online.com

PRIOR P/N: **p06109-464-0**  
 APPROVALS: **C. Danaher** DATE: **6/15/07**  
 ENGINEERING: **D. Senders**  
 MANUFACTURING: **See BOM**

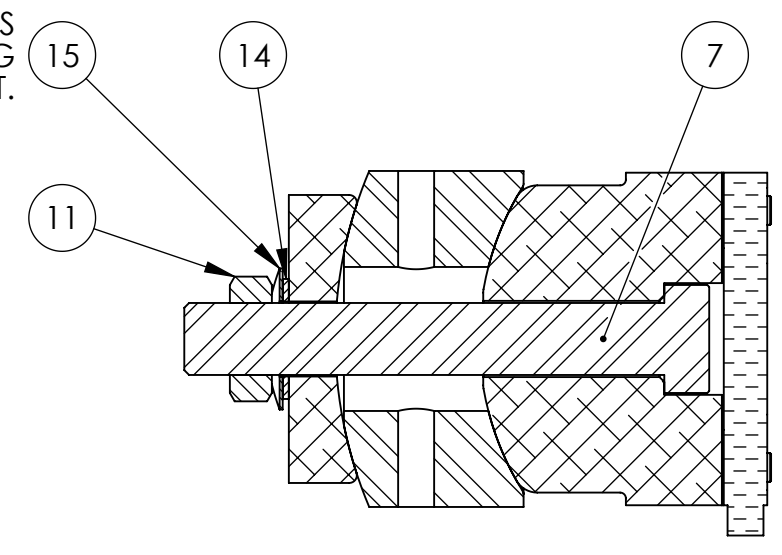
INTERNAL AND EXTERNAL INTERSECTIONS SHALL BE UNIFORMLY FINISHED WITH A CHAMFER .005/.010 X 45° OR RADIUS .005/.010.  
 CHAMFER ALL THREADED HOLES 110% OF MAJOR DIAMETER X 45°

DESCRIPTION: **ASM, POSITION SENSOR**  
 P/N: **D071464** CONFIG DESC: **HORIZONTAL**  
 FILE NAME: D071464-C Asm, Position Sensor

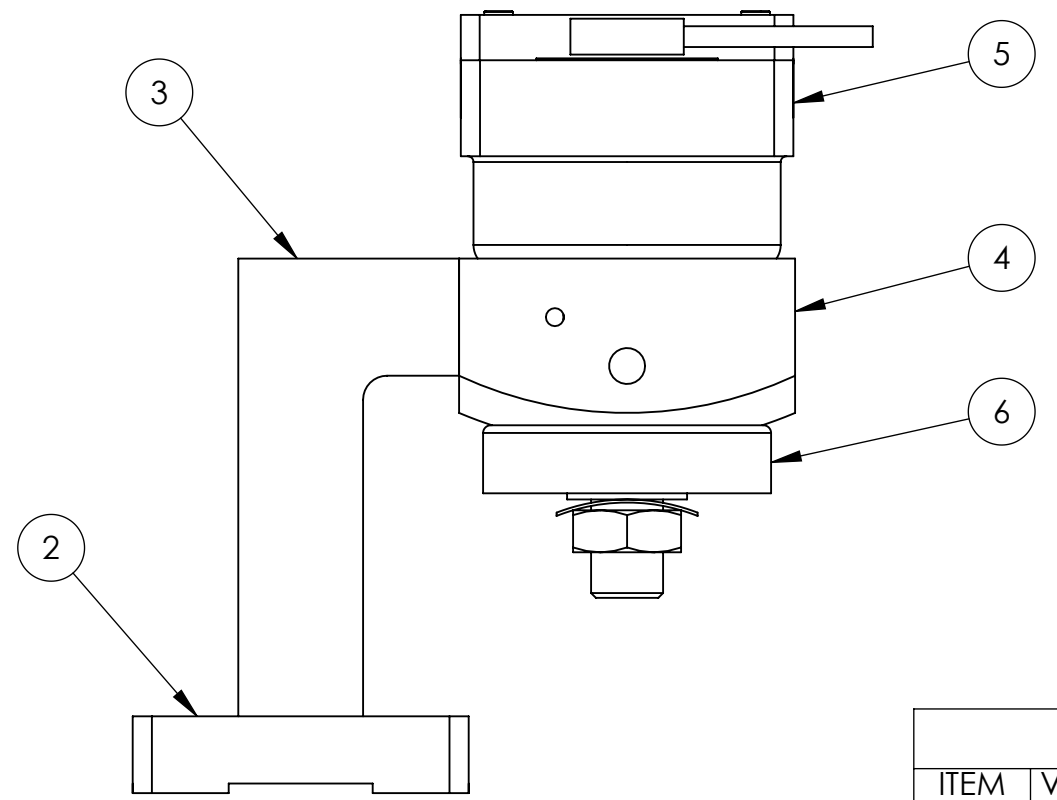
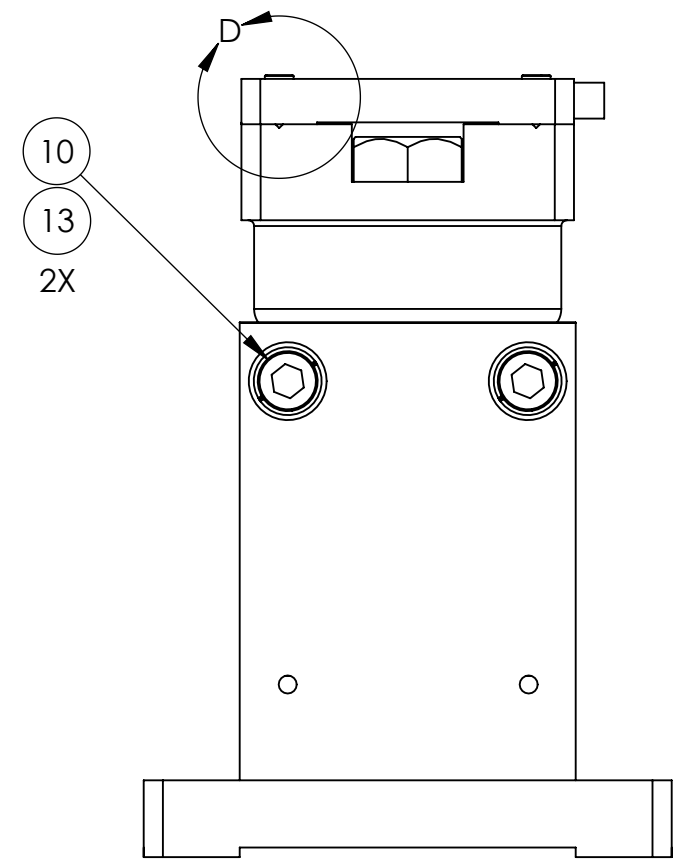
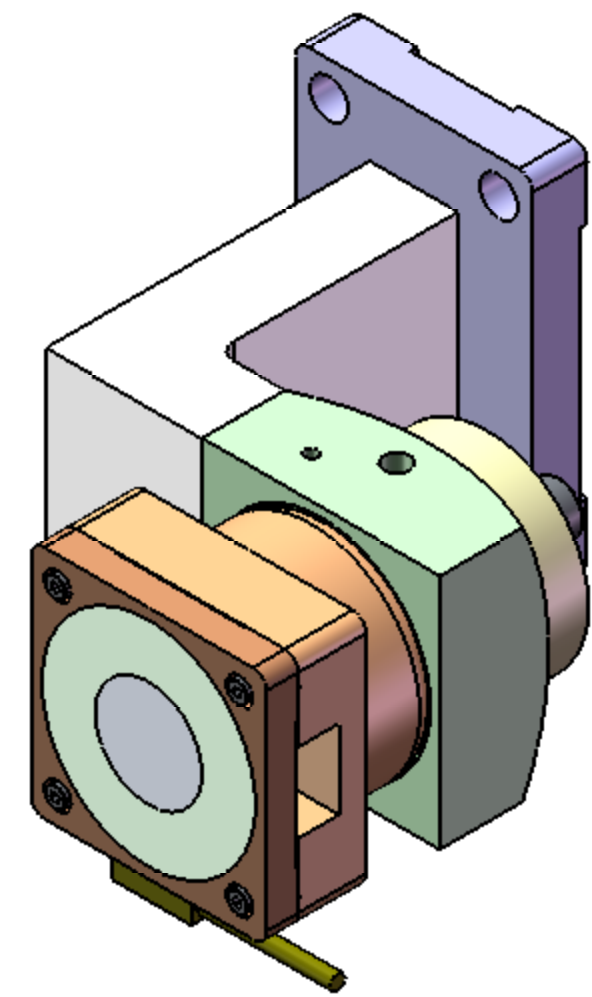
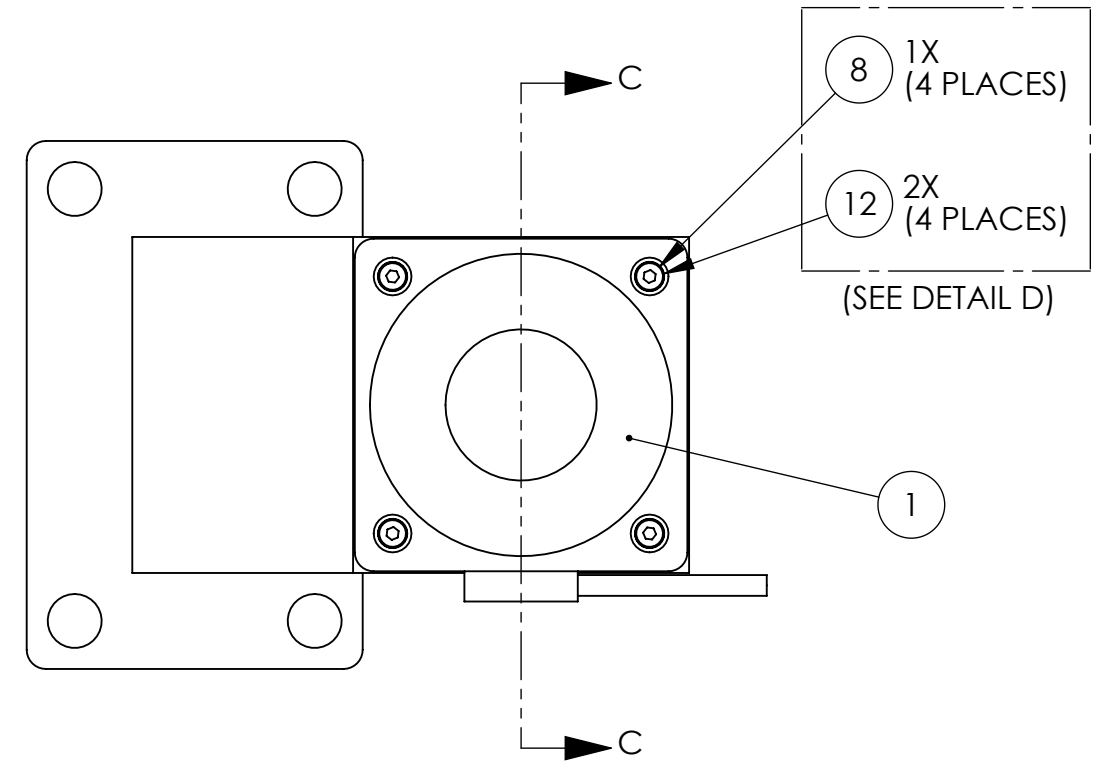
FOLDER:  
 SIZE: **C** SCALE: **1:1** DRAWN BY: **Dave Senders** REV: **C**  
 SHEET **1** OF **2** DATE PRINTED: **2/5/2008**

REVISION HISTORY				
REV	DATE	ECO	APPROVAL	DESCRIPTION
-	-	-	-	See Sheet1

SPRING WASHER PROVIDES ADJUSTABLE TENSION DURING SENSOR ALIGNMENT.



SECTION C-C

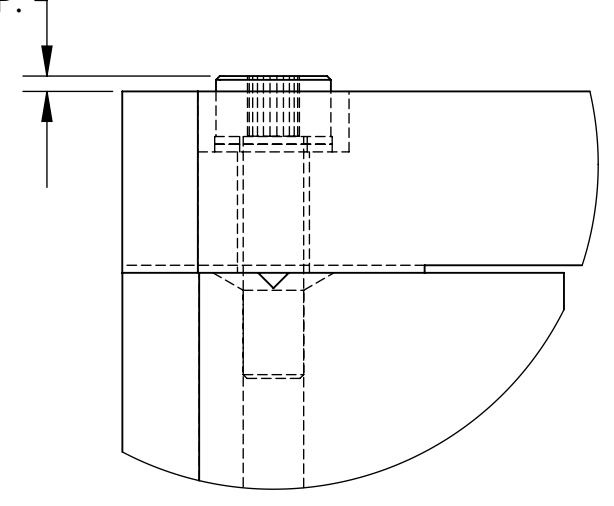


NOTES:

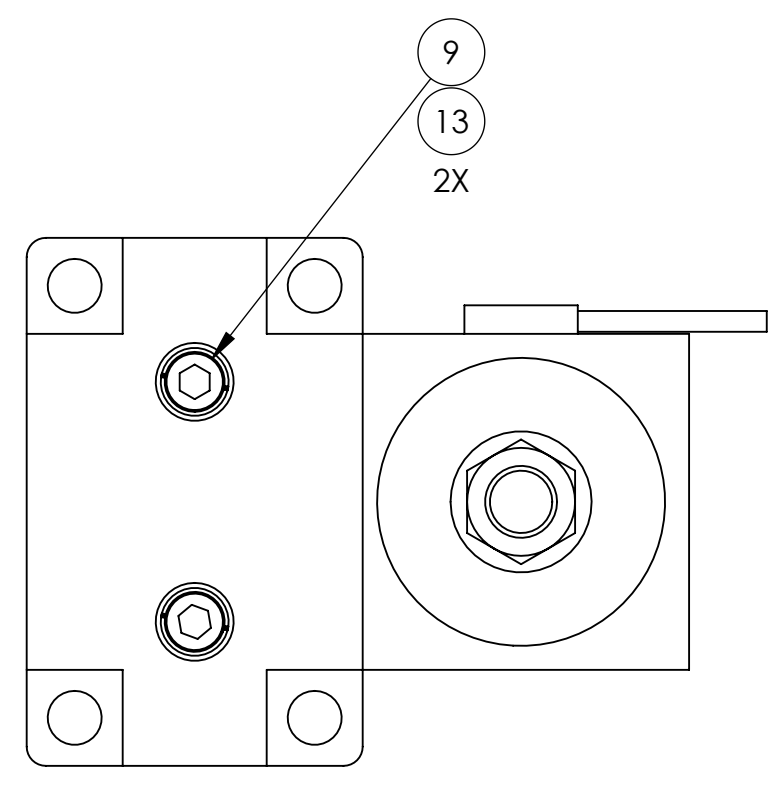
- SEE E070154 (ADVANCED LIGO SINGLE STAGE HAM VIBRATION ISOLATION TABLE ASSEMBLY PROCEDURE) FOR ADDITIONAL ASSEMBLY NOTES AND REQUIREMENTS.
- SENSORS ARE FRAGILE. HANDLE WITH CARE.

BILL OF MATERIALS					
ITEM NO.	Vertical/ QTY.	PART NUMBER	DESCRIPTION	CONFIG DESCRIPTION	MATERIAL
1	1	ADE 2822-V	CAPACITIVE POSITION SENSOR	20mm PROBE, VACUUM-COMPATIBLE	CERAMIC, ...
2	1	D071164	SENSOR HEAD BASE PLATE	-	6061-T6
3	1	D071175	SENSOR HEAD BRACKET, VERT	-	6061-T6
4	1	D071163	SENSOR HEAD MOUNT	-	6061-T6
5	1	D071161	SENSOR HEAD BASE	-	6061-T6
6	1	D071162	SENSOR HEAD WASHER	-	6061-T6
7	1	MCMMASTER 92198A634	HHCS	3/8"-16x2.5"	18-8 SS
8	4	MCMMASTER 91292A008	SHCS	M2-.4x8mm	18-8 SS
9	2	HOLOKROME 79020	SHCS	# 10-32x.50"	18-8 SS
10	2	HOLOKROME 79030	SHCS	# 10-32x1.25"	18-8 SS
11	1	MCMMASTER 91847A031	HEX JAM NUT	3/8"-16	18-8 SS
12	8	MCMMASTER 93574A161	PRECISION WASHER	.088"IDx.153"ODx.010"	18-8 SS
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15	1	MCMMASTER 9716K53	CURVED SPRING WASHER	.395"IDx.735"ODx.016"	301 SS

SCREW HEADS USED AS STOPS, TO PREVENT CRASHING TARGET INTO SENSOR.  
.020 TYP.



DETAIL D SCALE 4:1



**UNLESS OTHERWISE SPECIFIED:**  
DIMENSIONS ARE IN INCHES  
DECIMAL TOLERANCES:  
.XX ±.015 .XXX ±.005  
ANG TOL: ± 1° SURFACE ROUGHNESS: 63

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PRIOR P/N: **p06109-464-1**

APPROVALS	DATE
ENGINEERING D. Senders	6/15/07
MANUFACTURING	
QUALITY C. Danaher	6/15/07
MATL:	See BOM
FINISH:	See BOM

DESCRIPTION: **ASM, POSITION SENSOR**

P/N: **D071464** CONFIG DESC: **VERTICAL**

FILE NAME: D071464-C Asm, Position Sensor

FOLDER:

SIZE	SCALE: 1:1	DRAWN BY: Dave Senders	REV
<b>C</b>	SHEET 2 OF 2	DATE PRINTED: 2/5/2008	<b>C</b>

THIS PRINT & ITS RELATED MODEL ARE THE DOCUMENTATION OF RECORD. UNLESS OTHERWISE SPECIFIED, ALL FEATURES MUST CONFORM TO .010 TOTAL WIDE PROFILE OF A SURFACE. INTERPRET DWG PER ASME Y14.5M 1994