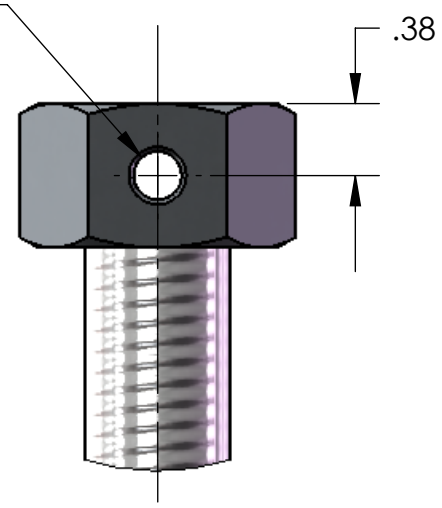
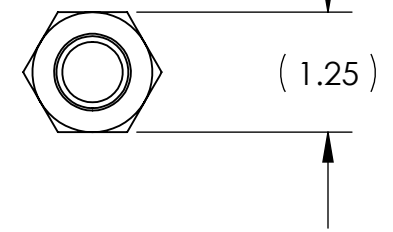
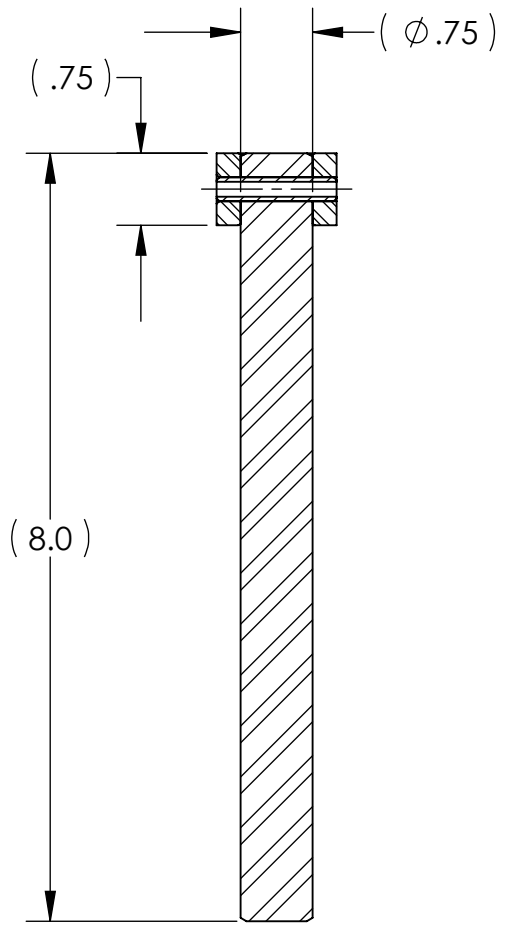
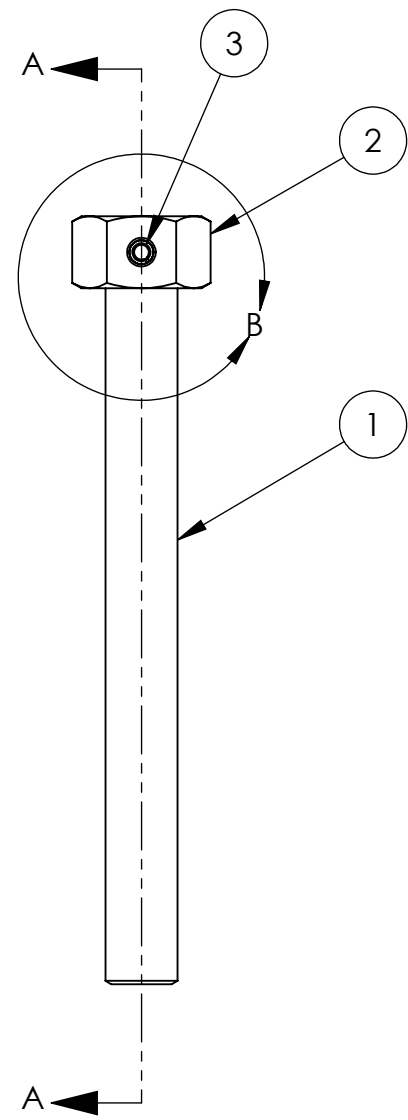
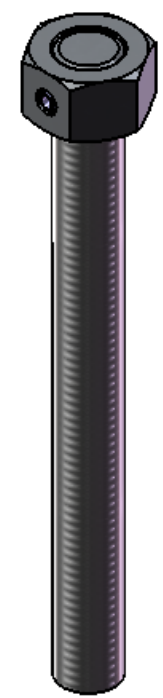


$\phi .252 \pm .001$ THRU ALL
 $\surd \phi .30 \times 82^\circ$, NEAR SIDE
 Drill thru Nut and Screw, using
 jam nut to hold assembly tight.

REVISION HISTORY				
REV	DATE	ECO	APPROVAL	DESCRIPTION
V1 / B	23 Jan 2008	-	A. Stein	Release for Enhanced LIGO.
V2	7 May 2009		A. Stein	Release for Advanced LIGO. Changed Spring Pin ordering details. Changed hole details.



DETAIL B
 SCALE 1 : 1
 BEFORE PIN INSERTION



SECTION A-A

MANUFACTURING NOTES:

- 1) ALL MACHINING FLUIDS MUST BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE, AND SILICONE, SUCH AS CINCINNATI MILACRON CIMTECH 410.
- 2) THOROUGHLY CLEAN PART TO REMOVE ALL OIL, GREASE, DIRT, AND CHIPS.
- 3) USE (ACME) JAM NUT TO HOLD DEPENDABLE ACME HEX NUT IN PLACE AT END OF SCREW. DRILL THRU NUT AND SCREW, AS SHOWN IN 'DETAIL B'.
- 4) PRESS OR HAMMER IN SPRING PIN, UNTIL PIN IS FLUSH WITH WRENCH FLATS ON NUT. REMOVE JAM NUT.

POST-MANUFACTURING NOTES:

- P1) CLEAN TO LIGO STANDARDS, CLASS B (PER E0900047 AND E960022).

BILL OF MATERIALS

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	CONFIG DESCRIPTION	MATERIAL
1	1	D071309	Spring Pull-Down, ACME Screw	-	See Notes
2	1	DEPENDABLE_ACME_3_4-10_Hex_Nut	ACME Hex Nut	3/4"-10	303 SS
3	1	MCMaster_92373A373	Spring Pin	1/4"x1.25", Split	18-8 SS

APPROVALS	DATE
ENGINEERING (HPD): D. Senders	10/4/2007
QUALITY (HPD): C. Danaher	10/4/2007
MATERIAL:	See BOM
FINISH:	See BOM
MASS:	1.2 lbs

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 DECIMAL TOLERANCES:
 .XX $\pm .015$.XXX $\pm .005$
 ANG TOL: $\pm 1^\circ$ SURFACE ROUGHNESS: $\sqrt{32}$
 REMOVE ALL SHARP EDGES.
 LEAVE .005 X 45° MIN CHAMFER,
 OR .005 MIN RADIUS.
 THIS PRINT & THE EMBEDDED CAD
 MODEL ARE THE DOCUMENTATION OF
 RECORD. UNLESS OTHERWISE SPECIFIED,
 ALL FEATURES MUST CONFORM TO .010
 TOTAL WIDE PROFILE OF A SURFACE.

ORIGINAL DESIGN BY:
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
 MODIFIED BY:

DESCRIPTION: Asm, Spring Tension Screw
 P/N: **D071499** CONFIG: -
 CAD FILE NAME: D071499_Asm-Spring_Tension_Screw
 PROJECT: HAM ISI, Advanced LIGO

SIZE B	SCALE: 1:2	DRAWN BY: Dave Senders (HPD)	REV V2
SHEET 1 OF 1	DATE PRINTED: 5/7/2009		