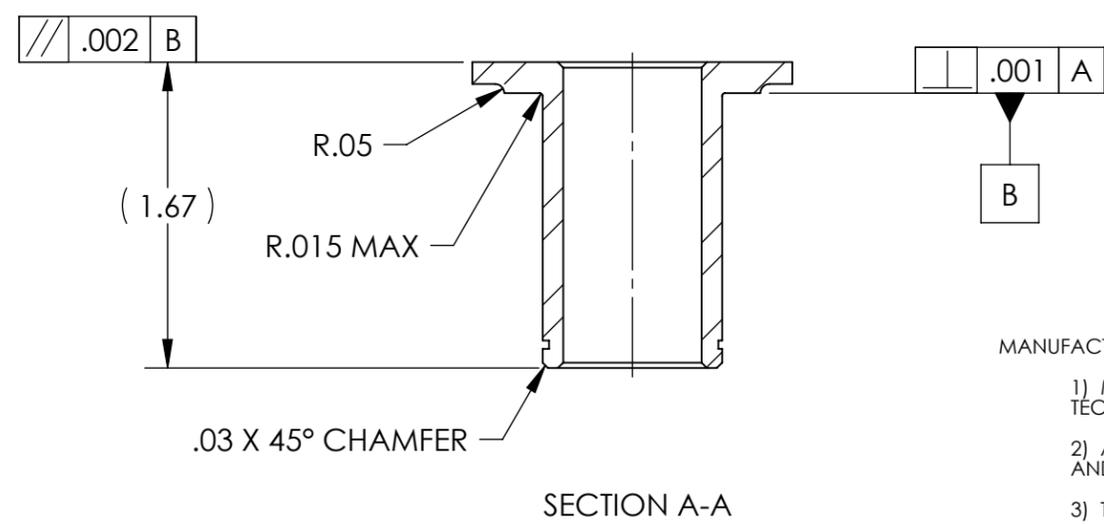
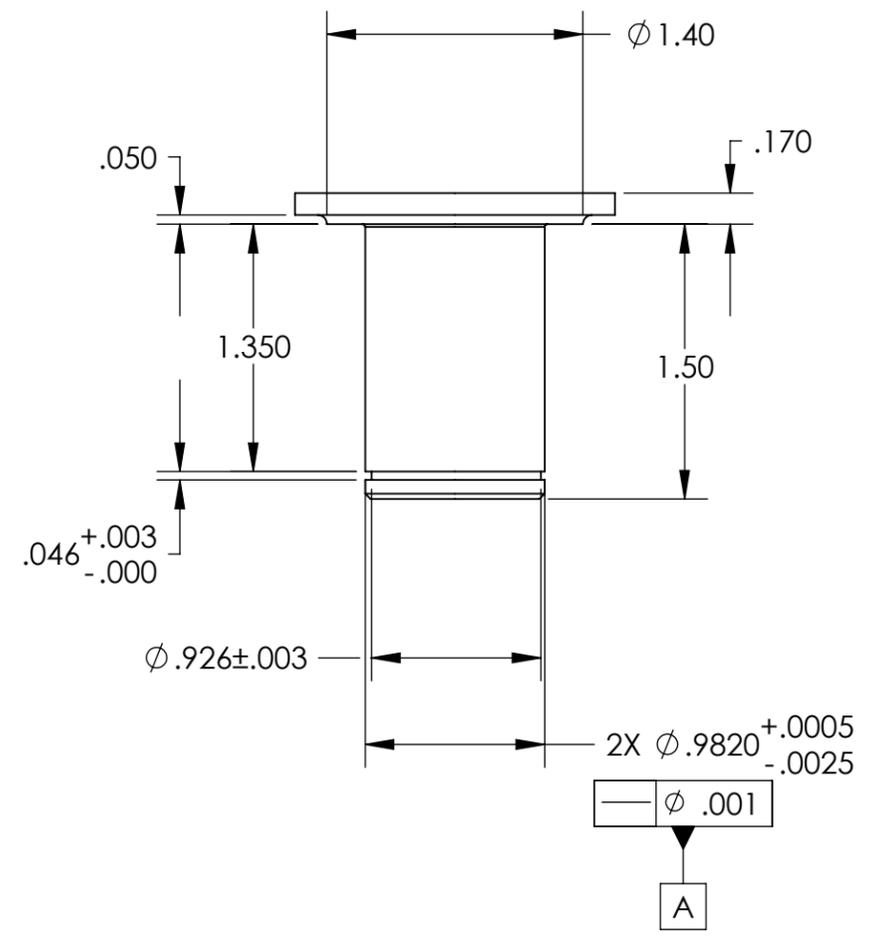
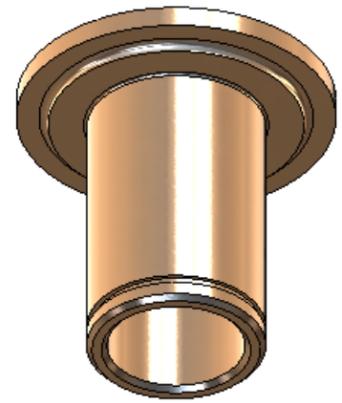
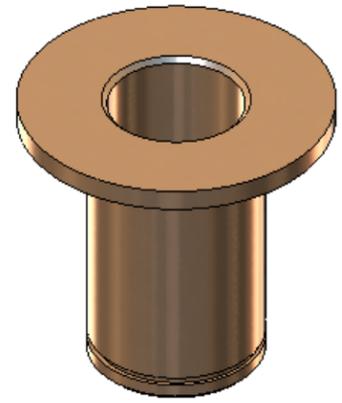
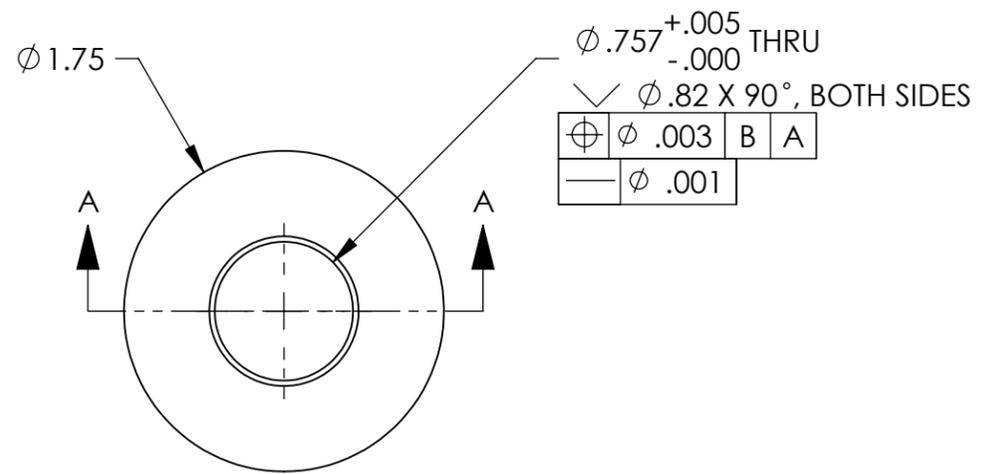


REVISION HISTORY				
REV	DATE	ECO	APPROVAL	DESCRIPTION
V1 / A	1 Aug 2007	1070	D. Senders	Release for Enhanced LIGO.
V2	23 Apr 2009		A. Stein	Release for Advanced LIGO. Changes to dimensions and tolerances.



MANUFACTURING NOTES:

- 1) MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. ABRASIVE REMOVAL TECHNIQUES (OTHER THAN DRESSED BLANCHARD GRINDING) ARE NOT ACCEPTABLE.
- 2) ALL MACHINING FLUIDS MUST BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE, AND SILICONE, SUCH AS CINCINNATI MILACRON CIMTECH 410.
- 3) THOROUGHLY CLEAN PART TO REMOVE ALL OIL, GREASE, DIRT, AND CHIPS.

POST-MANUFACTURING NOTES:

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

APPROVALS	DATE
ENGINEERING (HPD): D. Senders	8/1/2007
QUALITY (HPD): C. Danaher	8/1/2007
MATERIAL: 17-4 PH H1150	
FINISH: None	
MASS: 0.21 lbs	

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 DECIMAL TOLERANCES:
 .XX ±.015 .XXX ±.005
 ANG TOL: ± 1° SURFACE ROUGHNESS: 63
 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 DIMENSIONS IN THE MODEL ARE
 BASIC, WITH TOLERANCES GIVEN BY:



ORIGINAL DESIGN BY: High Precision Devices	MODIFIED BY: LIGO
1668 Valtec Lane, Suite C, Boulder, Colorado 80301 Phone: (303) 447-2558 Fax: (303) 447-2548 Web Site: www.hpd-online.com	
DESCRIPTION: Spring Pull-Down, Conversion Bushing	
P/N: D071304	CONFIG: -
CAD FILE NAME: D071304_Spring_Pull-Down-Conversion_Bushing	
PROJECT: HAM ISI, Advanced LIGO	
SIZE: B	SCALE: 1:1
SHEET 1 OF 1	DATE PRINTED: 4/24/2009
DRAWN BY: Dave Senders (HPD)	REV: V2