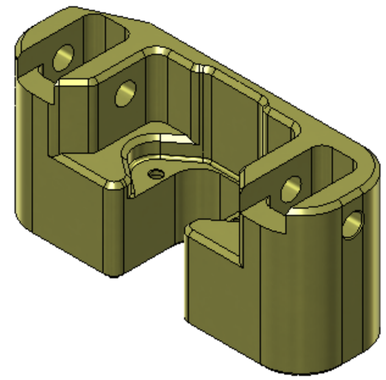
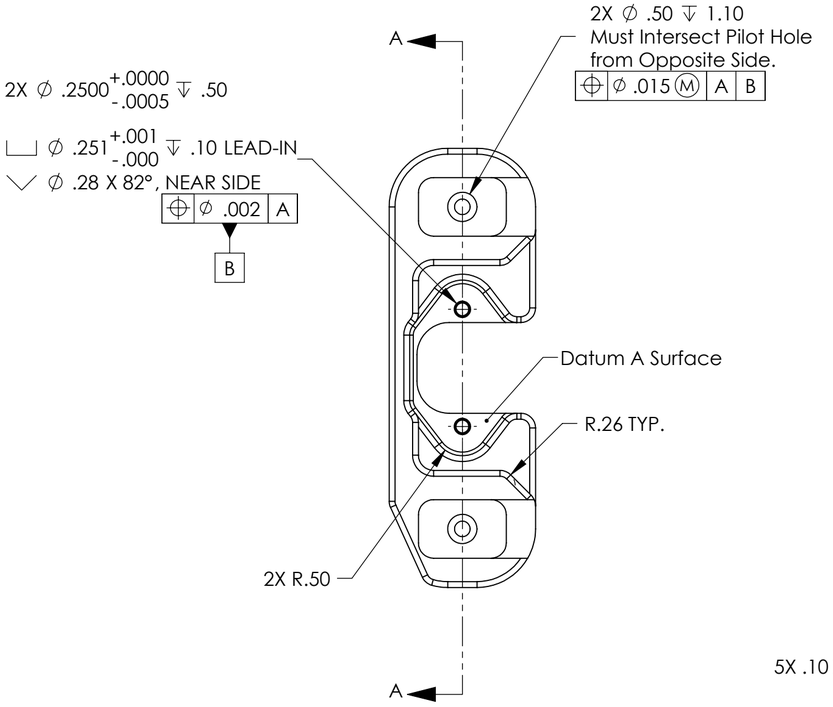
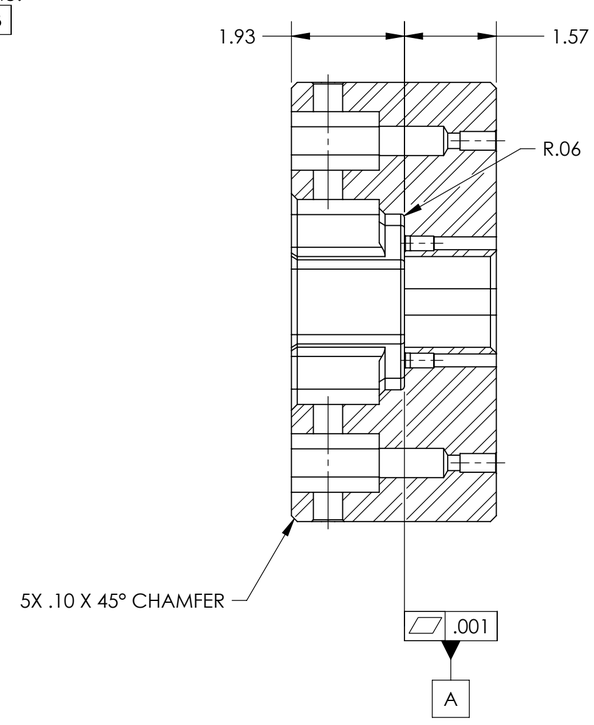
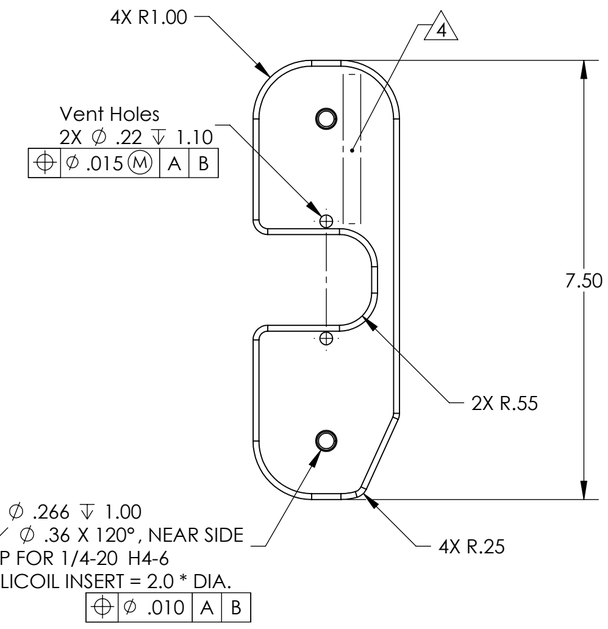
REVISION HISTORY				
REV	DATE	ECO	APPROVAL	DESCRIPTION
V1 / C	31 Jul 2007	1070	D.Senders	Release for Enhanced LIGO.
V2	23 Apr 2009		A. Stein	Release for Advanced LIGO. Increased 2x radius from .50 to .55. Minor changes to vent hole details. Added/modified c'sinks.

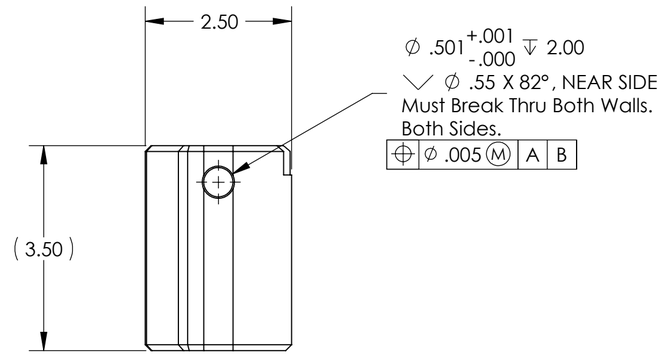






SECTION A-A





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.

4) WHERE INDICATED, MECHANICALLY SCRIBE, STAMP, OR ENGRAVE THE FOLLOWING INFORMATION AS SHOWN BELOW: **PART NUMBER-REVISION** (AND **TYPE** IF INDICATED), FOLLOWED ON THE NEXT LINE WITH A UNIQUE 3-DIGIT **SERIAL NUMBER** STARTING AT 001 FOR THE FIRST PART AND INCREMENTING THEREAFTER. USE 0.38" TALL CHARACTERS UNLESS PART SIZE DICTATES SMALLER.

D071305-V2
S/N - ###

5) DO NOT INSTALL HELI-COILS UNTIL POST-CLEANING.

POST-MANUFACTURING NOTES:

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

P2) INSTALL CLASS-B CLEAN HELI-COILS. BREAK OFF AND REMOVE TANGS. CHECK THAT END OF EACH INSERT REMAINS ENGAGED IN THREAD AFTER TANG REMOVAL.

HELI-COIL TABLE
(See Note 5)

Item No.	Thread Size	Material	Heli-Coil P/N 1185...	Qty.
1	1/4"-20 x .50"	Nitronic 60	-4EN500	2

APPROVALS	DATE
ENGINEERING (HPD): D. Senders	6/15/2007
QUALITY (HPD): C. Danaher	6/15/2007
MATERIAL: **2024-T351 Al**	
FINISH: **None**	
MASS: **3.8 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: .010 A B

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, Cap**
P/N: **D071305** CONFIG: **-**
CAD FILE NAME: D071305_Spring_Pull-Down-Cap
PROJECT: HAM ISI, Advanced LIGO
SIZE **C** SCALE: **1:2** DRAWN BY: **Dave Senders (HPD)** REV **V2**
SHEET **1** OF **1** DATE PRINTED: **4/24/2009**