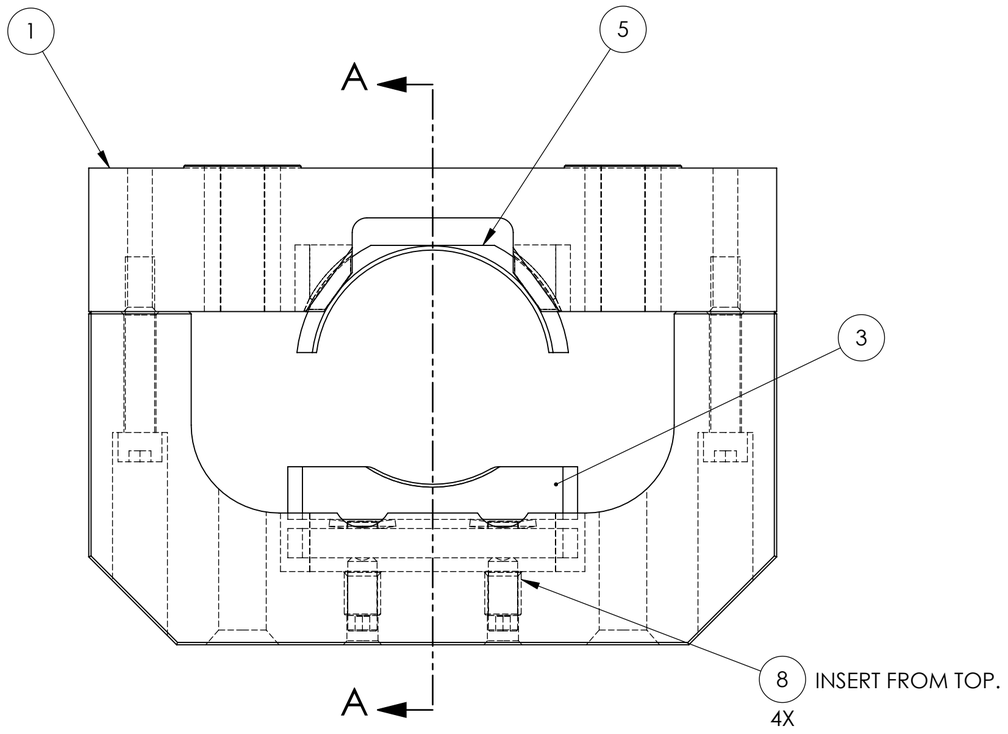
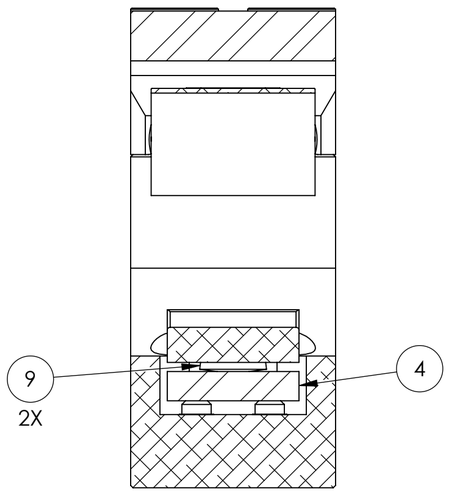
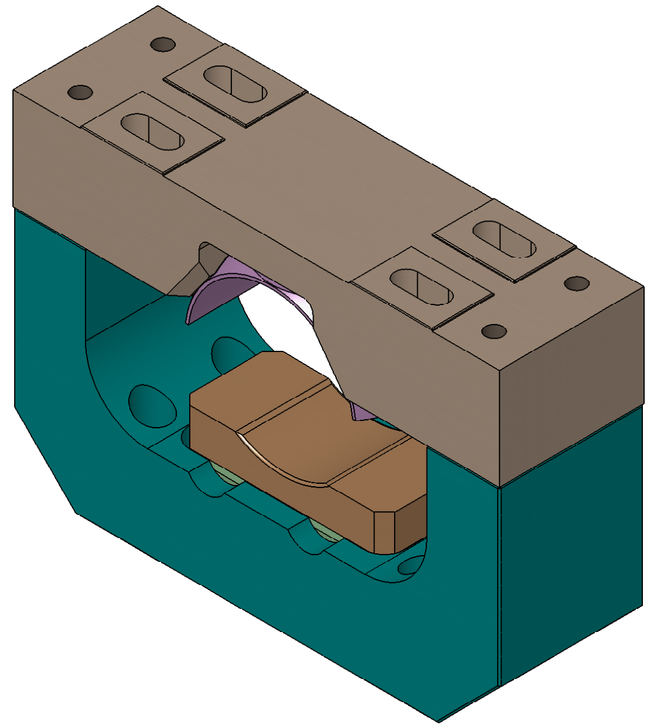
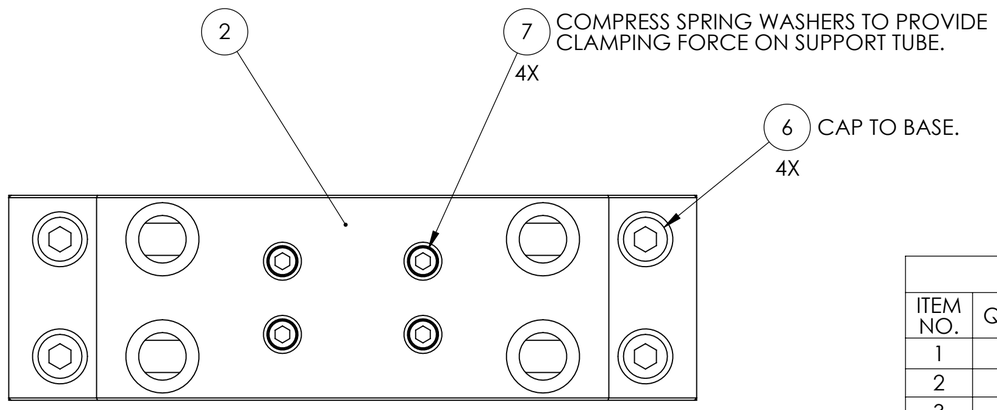
REV	DATE	APPROVAL	DESCRIPTION
00	11/06/2008	A. STEIN	PROTOTYPE RELEASE.





SECTION A-A





NOTES:

1) FIRST INSERT HELI-COILS.
2) SCREW 2X CLAMP BASE TO HAM CROSSBEAM.
3) PLACE 2X SLEEVE OVER ENDS OF SUPPORT TUBES.
4) MOVE CROSSBEAM OVER SUPPORT TUBES.
5) LOWER CROSSBEAM UNTIL CLAMP BASES ENGAGE CLAMP SLEEVES.
6) ADJUST SUPPORT STRUCTURE COMPONENTS PER ASSEMBLY PROCEDURE.
7) TORQUE SCREWS CONNECTING CAP TO BASE.
8) TORQUE SET SCREWS, TO PRELOAD CLAMP.

BILL OF MATERIALS

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	CONFIG DESCRIPTION	MATERIAL
1	1	D080374	CLAMP BASE, HAM SUPPORT TUBE	-	304 SS
2	1	D080375	CLAMP CAP, HAM SUPPORT TUBE	-	ALUMINUM 2024-T351
3	1	D080376	CLAMP PRELOAD, HAM SUPPORT TUBE	-	ALUMINUM 2024-T351
4	1	D080377	CLAMP WASHER PLATE, HAM SUPPORT TUBE	-	17-4 PH SS
5	1	D080378	CLAMP SLEEVE, HAM SUPPORT TUBE	-	ALUMINUM 2024-T351
6	4	MCMASTER 91274A476	SHCS	1/2"-13 X 3.0"	ALLOY STEEL
7	4	MCMASTER 92311A735	SOCKET SET SCREW	1/2"-20 X 1.25"	18-8 SS
8	4	HELICOIL 1191-8EN750	HELICAL INSERT	1/2"-20 X .75"	NITRONIC 60
9	2	BAUER 92051040	CONICAL SPRING WASHER	9000 lb FLATTENING FORCE	C60 STEEL

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. DO NOT SCALE FROM DRAWING.
2. REMOVE ALL SHARP EDGES. LEAVE .005 X 45° MIN CHAMFER, OR .005 MIN RADIUS.
3. ALL MACHINING FLUIDS MUST BE WATER SOLUBLE AND FREE OF SULFUR, CHLORINE AND SILICONE. E.G., MILACRON CIMTECH 410.
4. CLEAN THOROUGHLY TO REMOVE ALL OIL, DIRT, AND CHIPS.

DIMENSIONS ARE IN INCHES

TOLERANCES:
.XX ± 0.015
.XXX ± 0.005

ANGULAR ± 0.5 °

MATERIAL: SEE BOM

FINISH: SEE BOM

	NAME	DATE
DRAWN	A. STEIN	11/06/2008
CHECKED		
APPROVED		

LIGO — CALIFORNIA INSTITUTE OF TECHNOLOGY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, IGR, GLASGOW UNIVERSITY GEO 600 GROUP

SYSTEM: ADVANCED LIGO
SUB-SYSTEM: SEI
NEXT ASSY: HAM SUPPORT STRUCTURE
PART NAME: CLAMP ASM, HAM SUPPORT TUBE
SIZE: C | DWG. NO.: D080373 | REV.: 01
SCALE: 1:2 | PROJECTION: | SHEET 1 OF 1