3 2 **DRAWING TREE #** DATE DCN# NOTES CONTINUED: REV. (5) SCRIBE, ENGRAVE, LASER MARK OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVÍSION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY. IF PARTS ARE TOO SMALL TO SCRIBE, BAGGING AND TAGGING ALONE IS SUFFICIENT. EXAMPLE (PART): 001-v1 EXAMPLE (TAG): DXXXXXXX-VY, TYPE-XX, QTY: TBD 6. APPROXIMATE WEIGHT = X.XXX LB. -PIN 6 7. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH, USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED. REFER TO LIGO-E0900364 .066 TYP. -8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH PIN 1-LIGO SPECIFICATION E0900364. **FLEXIBLE** 9. ALL HELI-COIL HOLES TO BE PREPARED ACCORDING TO EMHART HELI-COIL PRODUCT CATALOG, HC2000, REV 4 .038 TYP. 10. ALL HELI-COIL INSERTS TO BE INSTALLED BY LIGO PERSONNEL, AFTER DELIVERY OF FINISHED PARTS, USE NITRONIC 60 THREADED INSERTS. .076 TYP. **STIFFENED** 11. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS, PLUGS OR RECYCLED MATERIAL). NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. DETAIL A **SCALE 2:1** REFER TO LIGO-E0900364. 12. SURFACE FINISH TO BE AS-PROCESSED FROM MILL/SUPPLIER, FREE FROM SCRATCHES OR GOUGES. 13. PART WILL BE PORCELAIN COATED PER LIGO SPECIFICATION E1000083 AFTER FABRICATION. THE INDICATED HOLES WILL BE MASKED PRIOR TO PORCELAIN COATING TO APPROXIMATELY 2.5-3X HOLE DIAMETER CENTERED ON BOTH SIDES OF THE HOLE. 14. DIMENSIONS APPLY BEFORE PORCELAIN COATING UNLESS SPECIFIED. 15. BEND RADIUS: UNLESS OTHERWISE NOTED, THE BEND RADIUS SHOULD BE THE 4.80 MINIMUM REQUIRED TO FORM WITHOUT CRACKING OR REQUIRING ADDITIONAL WORK WHEN FORMING. IN PARTICULAR IF SHEET METAL IS TO BE PORCELAIN COATED, **TOP SIDE** THE BEND RADIUS SHALL BE A MINIMUM OF .12" OUTSIDE RADIUS OF BEND UNLESS **BOTTOM SIDE -**.033 OTHERWISE NOTED. NOTES 9, 10, 13 and 14 DO NOT APPLY TO THIS PART .500 .018 🖚 .639 1.402 2.37 **-3.134** -3.521 **-4.150** R.02-R.02-4.350 4.479 .93 62.0° 2.84 31.0° 31.0° R.02-.033 .005 NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED) **PART NAME** CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY FLEXIBLE IN-VAC PCB FOR BEAM DIVERTER A 1. INTERPRET DRAWING PER ASME Y14.5-1994. DIMENSIONS ARE IN 2. REMOVE ALL SHARP EDGES, .005-.015. FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATLEY R.02 FOR SHEET METAL PARTS. SYSTEM SUB-SYSTEM TOLERANCES: R. ABBOTT | FEB/2/2012 | SIZE | DWG. NO. 3. DO NOT SCALE FROM DRAWING. ISC 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE. D1102368 **DRAFTER E. BROWN** | FEB/2/2012 .XXX ±

NEXT ASSY

μinch

6

CHECKER

APPROVAL

SHEET 1 OF 1

PROJECTION:

ANGULAR ± °

MATERIAL