

NOTES CONTINUED:

5. SCRIBE, ENGRAVE, LASER MARK OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION 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): DXXXXXX-VY, TYPE-XX, QTY: TBD

6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED. REFER TO LIGO-E0900364

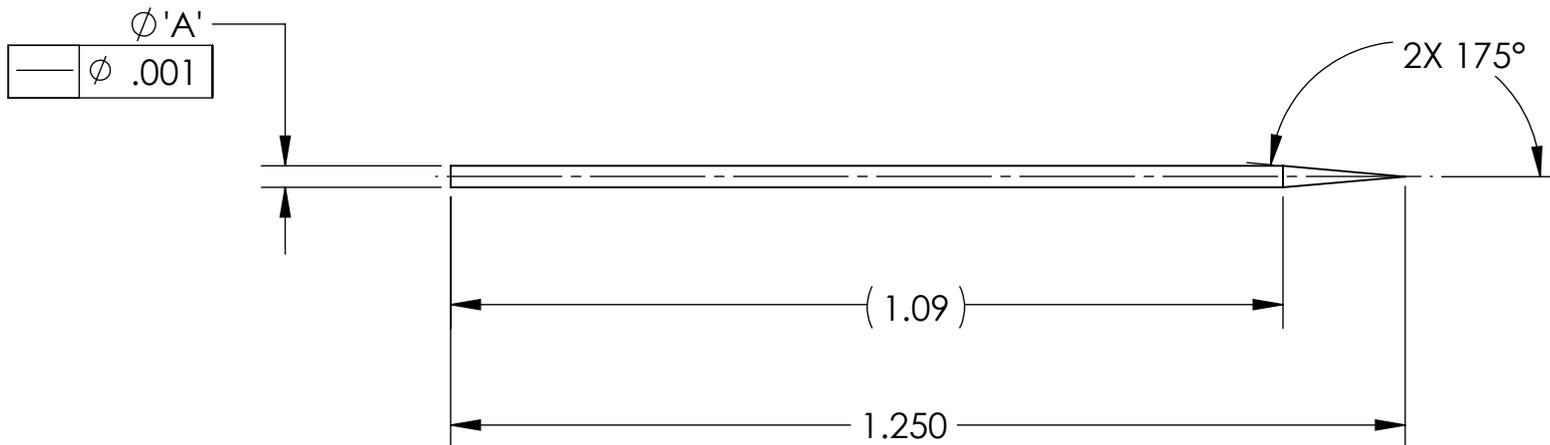
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

8. 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. REFER TO LIGO-E0900364.

9. NOTE 6 NOT APPLICABLE. GRINDING OPERATIONS ARE ACCEPTABLE. TIGHT TOLERANCES PRECLUDE MACHINING.

REV.	DATE	DCN #	DRAWING TREE #
v1	13 OCT 2014	E1400397-x0	-
v4	09 DEC 2014	E1400397-x0	-
-	-	-	-

TYPE	Ø 'A' (INCHES)	DIA. TOLERANCES	MATERIAL	GRADE	SUGGESTED SOURCE
-1	.0280	+/- .0002	SSTL	301, 302, 304, 316, OR 317	ZIGGY'S TUBES AND WIRES, INC.
-2	.0300	TBD	TITANIUM	CP GRADE 1	TRICOR METALS
-3	.0280	+/- .0001	TUNGSTEN	CP	SATURN INDUSTRIES



NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES

TOLERANCES:

.XX ± .01
 .XXX ± .005

ANGULAR ± 0.5°

1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, .005-.015. FOR MACHINED PARTS.
3. DO NOT SCALE FROM DRAWING.
4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL

SEE TABLE 1

FINISH

9 μinch



SYSTEM
ADVANCED LIGO

SUB-SYSTEM
SYS

NEXT ASSY

D1400331

PART NAME

αLIGO, SURFACE CHARGE CONTROL IONIZER, NEEDLE

DESIGNER

D.COYNE

DRAFTER

E.SANCHEZ

13 OCT 2014

CHECKER

SEE DCC

SEE DCC

APPROVAL

SEE DCC

SEE DCC

SIZE

DWG. NO.

A

D1400350

REV.

v4

SCALE: 4:1

PROJECTION:



SHEET 1 OF 1