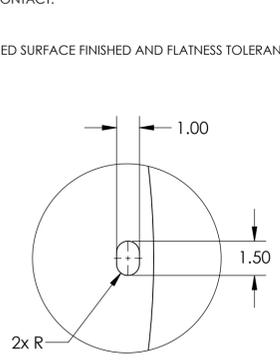


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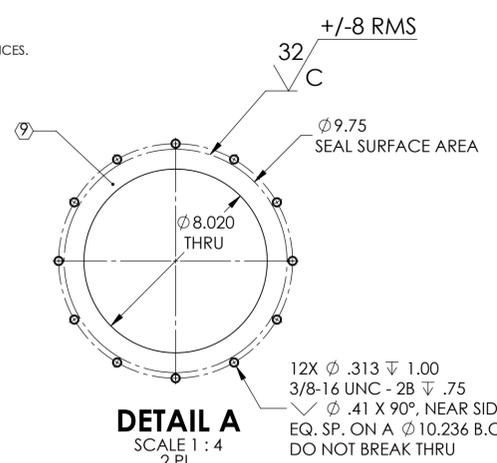
- 5. SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR 'TYPE' IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX
- 6. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED. REFER TO LIGO SPECIFICATION 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 SPECIFICATION E0900364
- 9. VACUUM SEALING SURFACE
- 10. BOTH SURFACES OF PLATE WILL BE USED IN ULTRA HIGH VACUUM SERVICE.
- 11. ALL SEALING SURFACES SHALL MEET THE FOLLOWING REQUIREMENTS:
 - A. BASIC FINISH IS 32 RMS, CONCENTRIC LAY.
 - B. THE FOLLOWING ARE NOT ALLOWED: GRINDING, HONING, LAPPING, POLISHING, BUFFING, SANDING, BLASTING, OR ANY OTHER PROCESS THAT DISTURBS THE CONCENTRIC MACHINING LAY, IMBEDS MATERIAL INTO THE SURFACE, OR SMEARS THE SURFACE.
- 12. USE ONLY TUNGSTEN CARBIDE TOOLING TO MACHINE THIS PART.
- 13. O-RING GROOVES AND VENT GROOVE MUST BE MACHINED DURING THE SAME SETUP

- 14. NO ABRASIVE STONES, CLOTHS, OR GRINDING WHEELS MAY BE USED.
- 15. NO OIL BASED OR HYDROCARBON BASED CUTTING FLUIDS MAY BE USED.
- 16. DO NOT ALLOW PART TO BE CONTAMINATED BY CARBON STEEL OR IRON CONTACT.
- 17. LEAK CHECK SEPTUM PLATE PER E1900079
- 18. PACKAGE, HANDLE, AND SHIP IN SUCH A MANNER AS TO MAINTAIN SPECIFIED SURFACE FINISHED AND FLATNESS TOLERANCES.

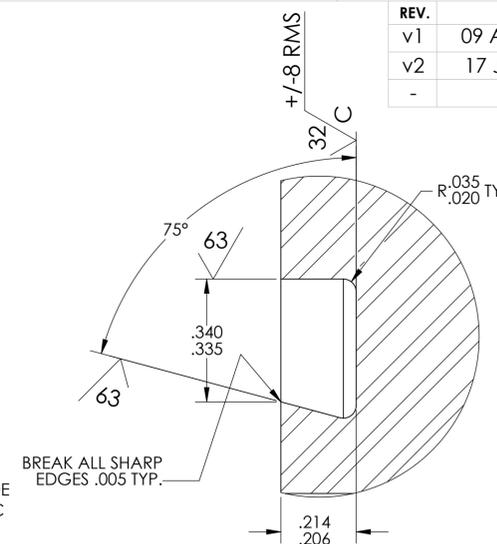
REV.	DATE	DCN #	DRAWING TREE #
v1	09 APR 2019	-	-
v2	17 JUL 2019	E1900228	-
-	-	-	-



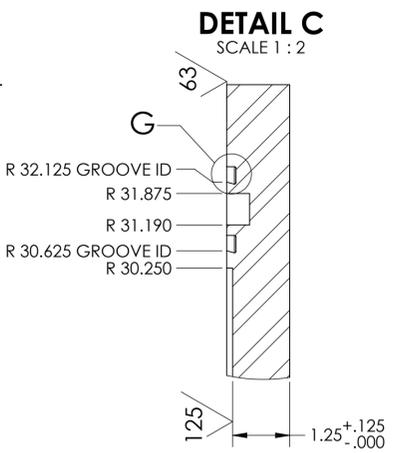
DETAIL F
SCALE 1 : 4
THRU
30X EQ. SP. 6° APART



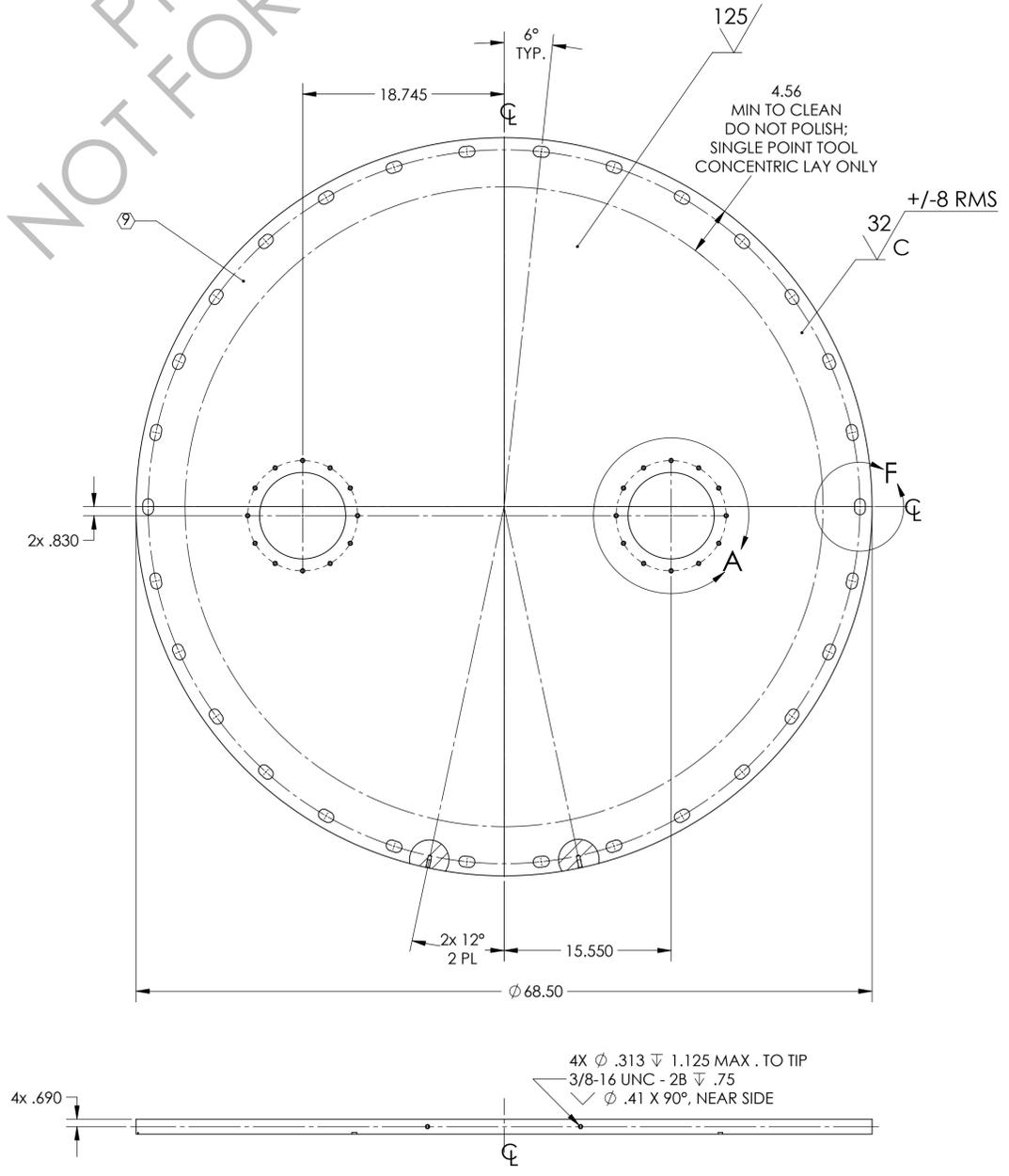
DETAIL A
SCALE 1 : 4
2 PL.



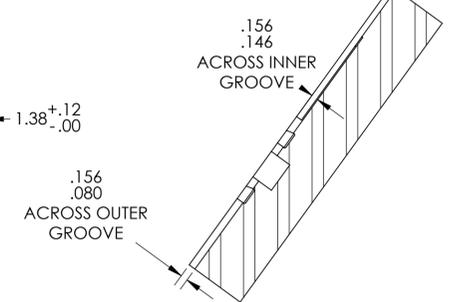
DETAIL G
SCALE 4 : 1
O-RING GROOVE DETAIL
2 PL.



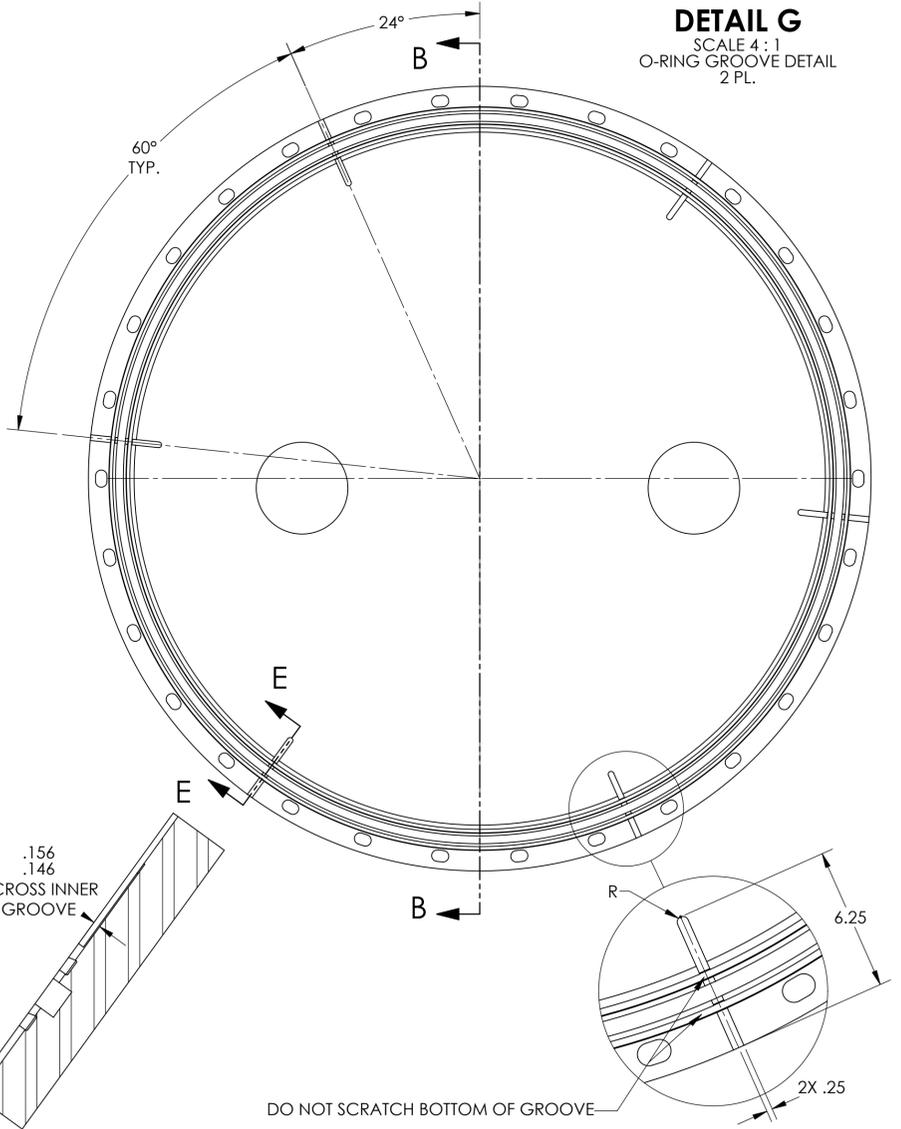
DETAIL C
SCALE 1 : 2



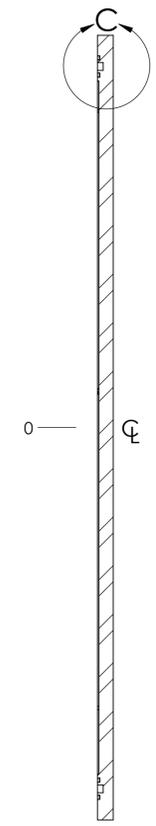
SECTION E-E
SCALE 1 : 2
6 PL.



SECTION E-E
SCALE 1 : 2
6 PL.



DETAIL D
SCALE 1 : 4
6 PL.
(PUMP OUT GROOVE DETAIL)



SECTION B-B

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)	
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.	
DIMENSIONS ARE IN INCHES	
TOLERANCES:	
.XX ± .03	
.XXX ± .005	
ANGULAR ± 0.5°	
MATERIAL	AISI 304
FINISH	125 μinch

LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
SYSTEM	A+	A+, VE, H1/L1 OUTPUT SEPTUM PLATE	
SUB-SYSTEM	VE	DESIGNER	E.SANCHEZ
NEXT ASSY	TBD	DRAFTER	E.SANCHEZ
		CHECKER	SEE DCC
		APPROVAL	SEE DCC
		SIZE	D
		DWG. NO.	D1900111
		REV.	v2
		SCALE:	1:8
		PROJECTION:	
		SHEET	1 OF 1