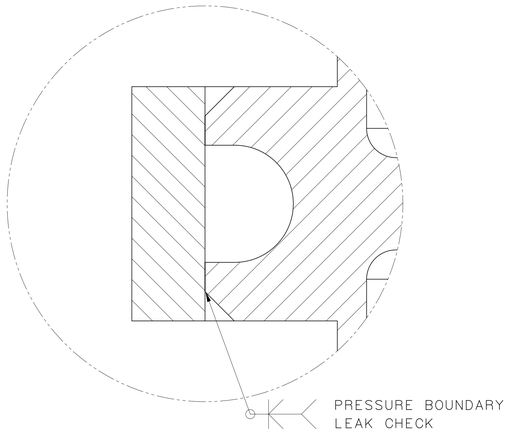
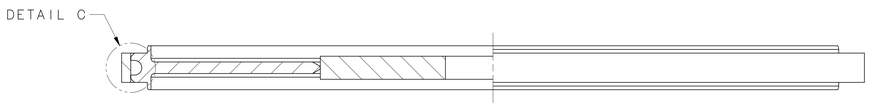
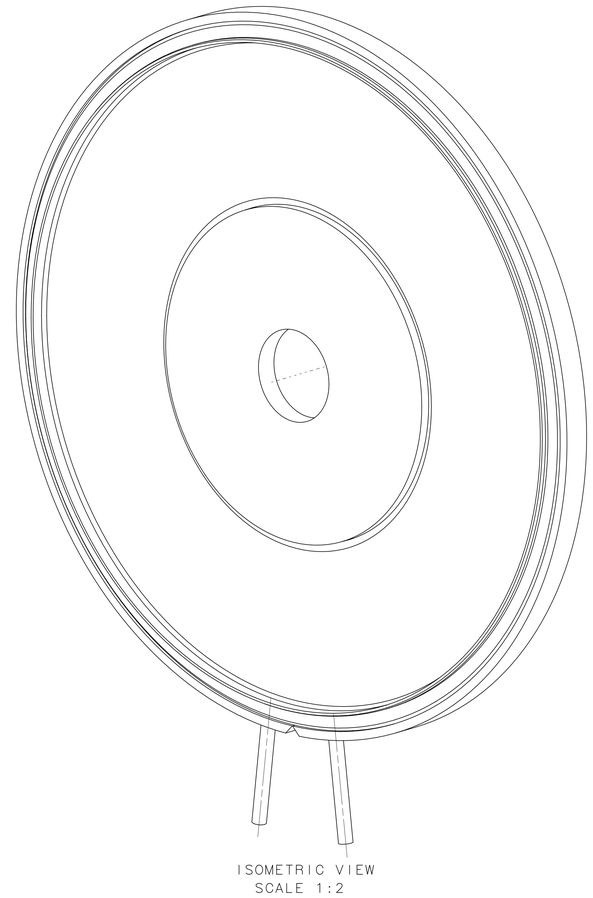
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ADDED APERTURE CENTER PLATE ITEM 4.	6/16/14	
	B	ADDED APERTURE CENTER PLATE ITEM 3. ADDED SHEET 3 TO SHOW ITEM 3. ADDED NEW DETAIL VIEWS TO SHEET 3. MODIFIED SHEET 2 AND REMOVED THE TUBE ITEM 2 FROM ITEM 1. MODIFIED ITEM 2 SO THAT IT IS NOT VERTICAL ON ITEM 1 BUT AT A *7 ANGLE	02JUL14 02JUL14	T.MICHALSKI W.CRAHEN



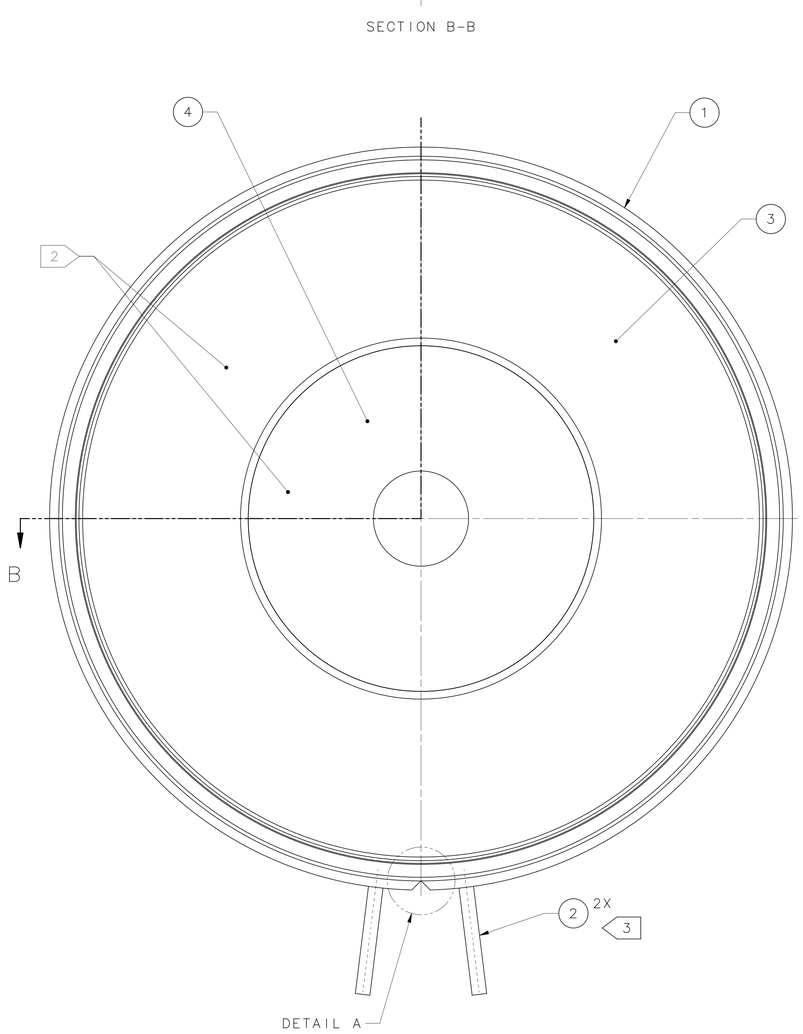
DETAIL C
SCALE 4:1



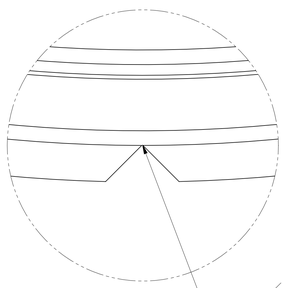
SECTION B-B



ISOMETRIC VIEW
SCALE 1:2



DETAIL A



DETAIL A
SCALE 2:1

NOTES:

1. FOR ALL WELD INFORMATION REFERENCE SOW.
2. BLACK ANODIZE BOTH SIDES OF ITEM 1 (JL0012455) AND ITEM 4 (JL0016565) FOR HEAT DISSIPATION AFTER WELDING.
3. SUGGESTED VENDOR OR JLAB EQUIVALENT.

   McMASTER-CARR
   200 NEW CANTON WAY
   ROBBINSVILLE, NJ 08691-2343
   PHONE: 609-689-3000

4. CAP TUBE AND HYDROSTATIC PRESSURE AS IT'S PART OF B31.9 PRESSURE SYSTEM TEST TO 150 PSI AND PROVIDE WRITTEN CONFIRMATION.
5. ANNEAL ITEMS 1 & 4 (IF REQUIRED) PRIOR TO WELDING.
6. MACHINE IN THIS AREA AFTER ANODIZE TO PREP FOR WELDING ITEM 2 AND ASSEMBLY WELD INTO SPOOL

QTY REQD	ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	NOTES
1	4		APERTURE CENTER PLATE	ALUMINUM ALLOY 5052-0	
1	3		VACUUM TUBE APERTURE PLATE	ALUMINUM ALLOY 6061-0	
2	2		.50 ALUMINUM TUBE	ALUMINUM ALLOY 5052-H32	
1	1		VACUUM TUBE APERTURE INPUT/OUTPUT	ALUMINUM ALLOY 5052-H32	

PARTS LIST

EACH SHEET OF MULTI-SHEET DRAWINGS SHALL ALWAYS HAVE THE SAME REVISION LEVEL.

FOR JLAB INTERNAL USE ONLY

ALL WELDS ON THIS DRAWING ARE AS DEFINED BY JLAB ES & H MANUAL, WELDING & BRAZING PROGRAM SUPPLEMENT.

WELD CLASS: B

WELD SPECIFICATION: AWS D1.2

WELD ANALYSIS: TBD

DIM & TOL PER ASME Y14.5
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES.
TOLERANCES ARE:
FRACTIONS ± N/A DECIMAL .X ± .1 .XX ± .01 .XXX ± .005 ANGLES ± .50'

THIRD ANGLE PROJECTION

MATERIAL: SEE PARTS LIST

FINISH: MACHINED SURFACES 125 UNLESS OTHERWISE NOTED
DEBURR & BREAK ALL SHARP EDGES

DO NOT SCALE DRAWING

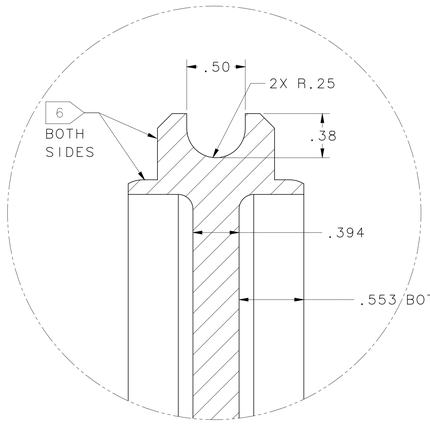
DRAWN: C.HAYS DATE: 04/30/14

United States Department of Energy — Jefferson Lab, Thomas Jefferson National Accelerator Facility — Newport News Virginia

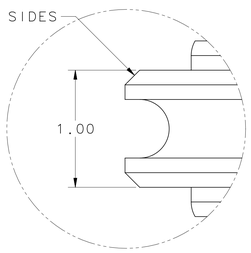
VAC
TUBES AND CHAMBERS
TUBES AND ASSEMBLIES
VACUUM TUBE APERTURE PLATE ASSEMBLY

SIZE: E DWG. NO.: JL0014254 REV.: B

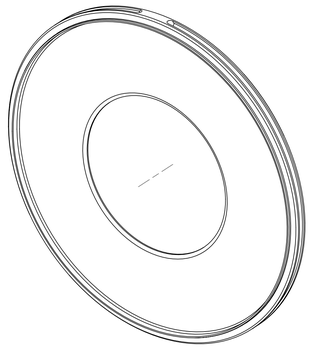
SCALE: 1:2 USED ON ASSY NO.: JL0009934 SHEET 1 OF 3



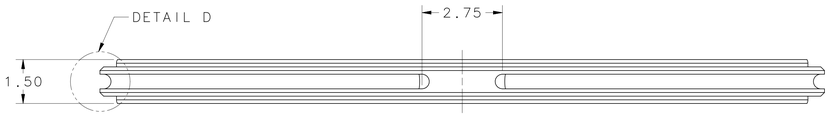
DETAIL E
SCALE 2:1

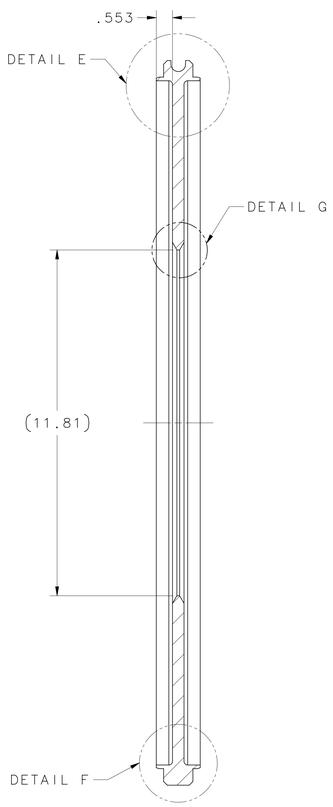


DETAIL D
SCALE 2:1

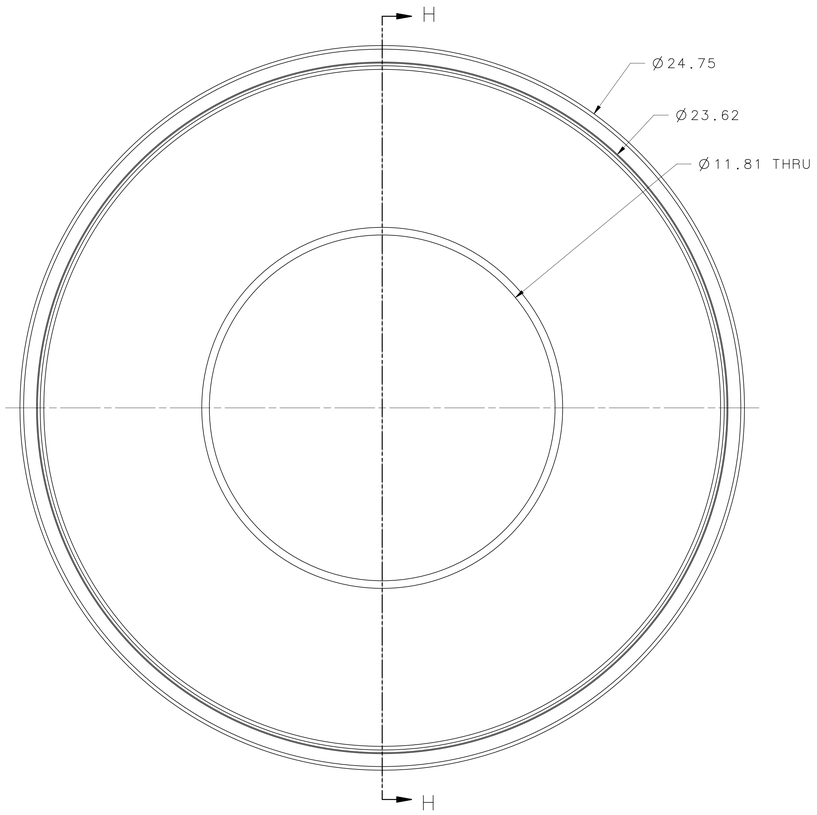


ISOMETRIC VIEW
SCALE: 1/4

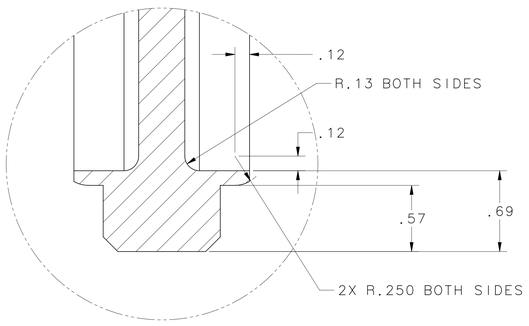




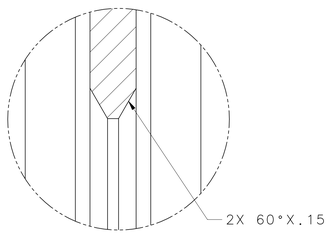
SECTION H-H



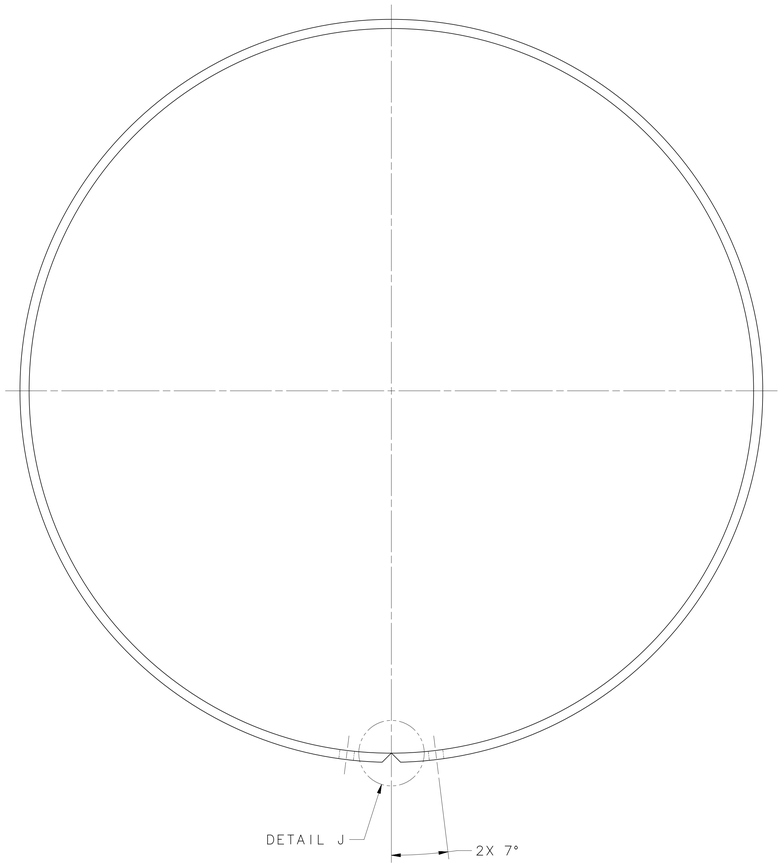
VACUUM TUBE APERTURE PLATE
SCALE 1:2
ITEM 3



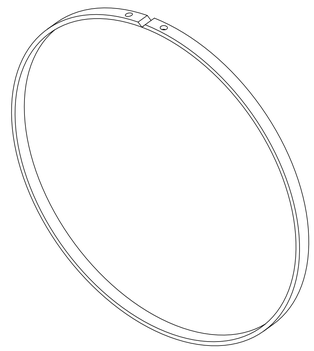
DETAIL F
SCALE 2:1



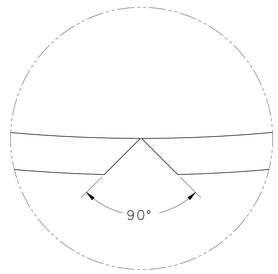
DETAIL G
SCALE 2:1



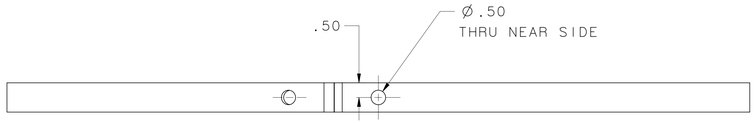
VACUUME TUBE APERTURE INPUT/OUTPUT
AND TUBES
SCALE 1:2
ITEM 1



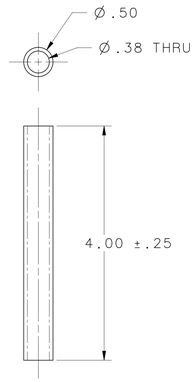
ISOMETRIC VIEW
SCALE: 1/4



DETAIL J
SCALE 2:1



EDGE VIEW
ORIENTED TO HOLE

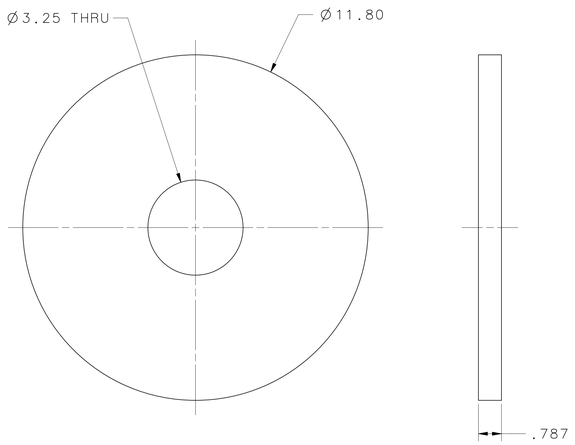


ALUMINUM TUBE
SCALE 1:1

ITEM 2

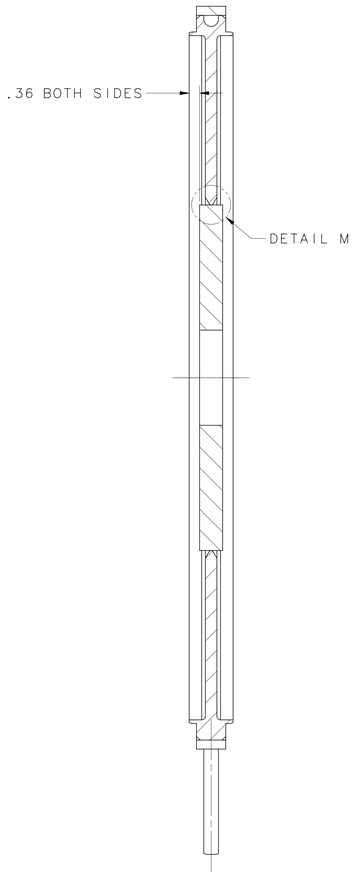
SIZE	DWG. NO.	REV.
E	JL0014254	B
SCALE 1:2	USED ON ASSY NO. JL0009934	SHEET 2 OF 3

Approved: 8/18/2014; E-Sign ID : 281331; signed by: Ap. 1: T. Michalski; C.: B. Crahen; D: B. Paul

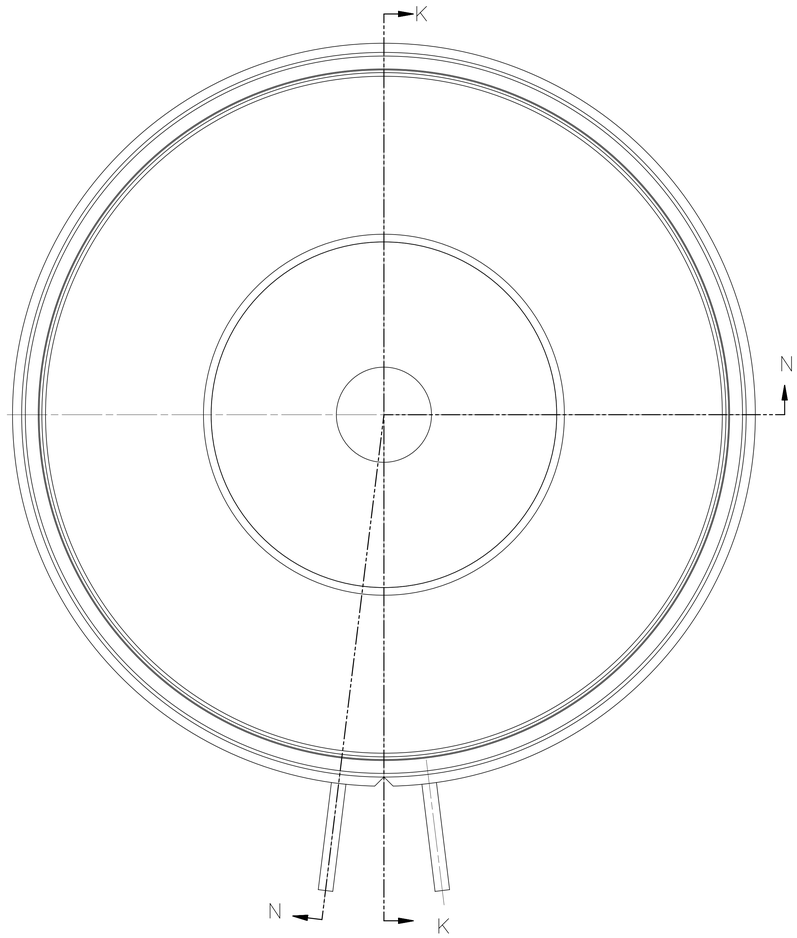


APERTURE CENTER PLATE

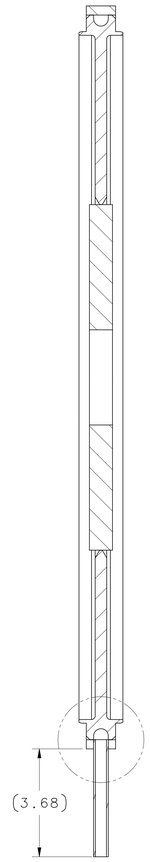
ITEM 5



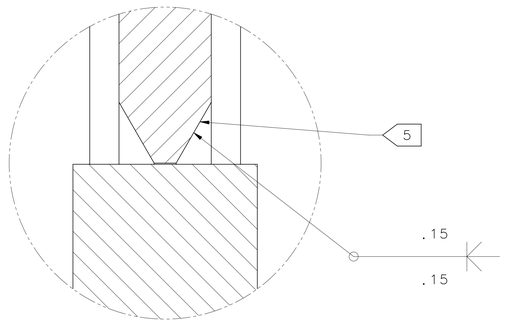
SECTION K-K



VACUUM TUBE APERTURE PLATE ASSEMBLY

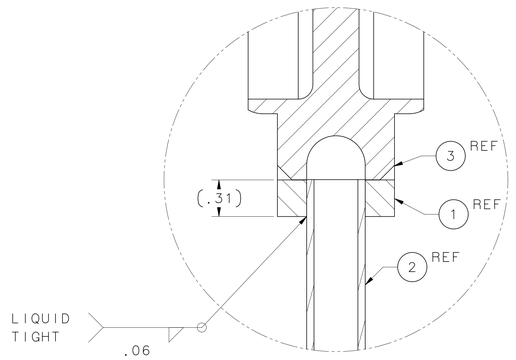


SECTION N-N



DETAIL M

SCALE 4:1



DETAIL L

SCALE 2:1

SIZE	DWG. NO.	REV.
E	JL0014254	B
SCALE 1:2	USED ON ASSY NO. JL0009934	SHEET 3 OF 3