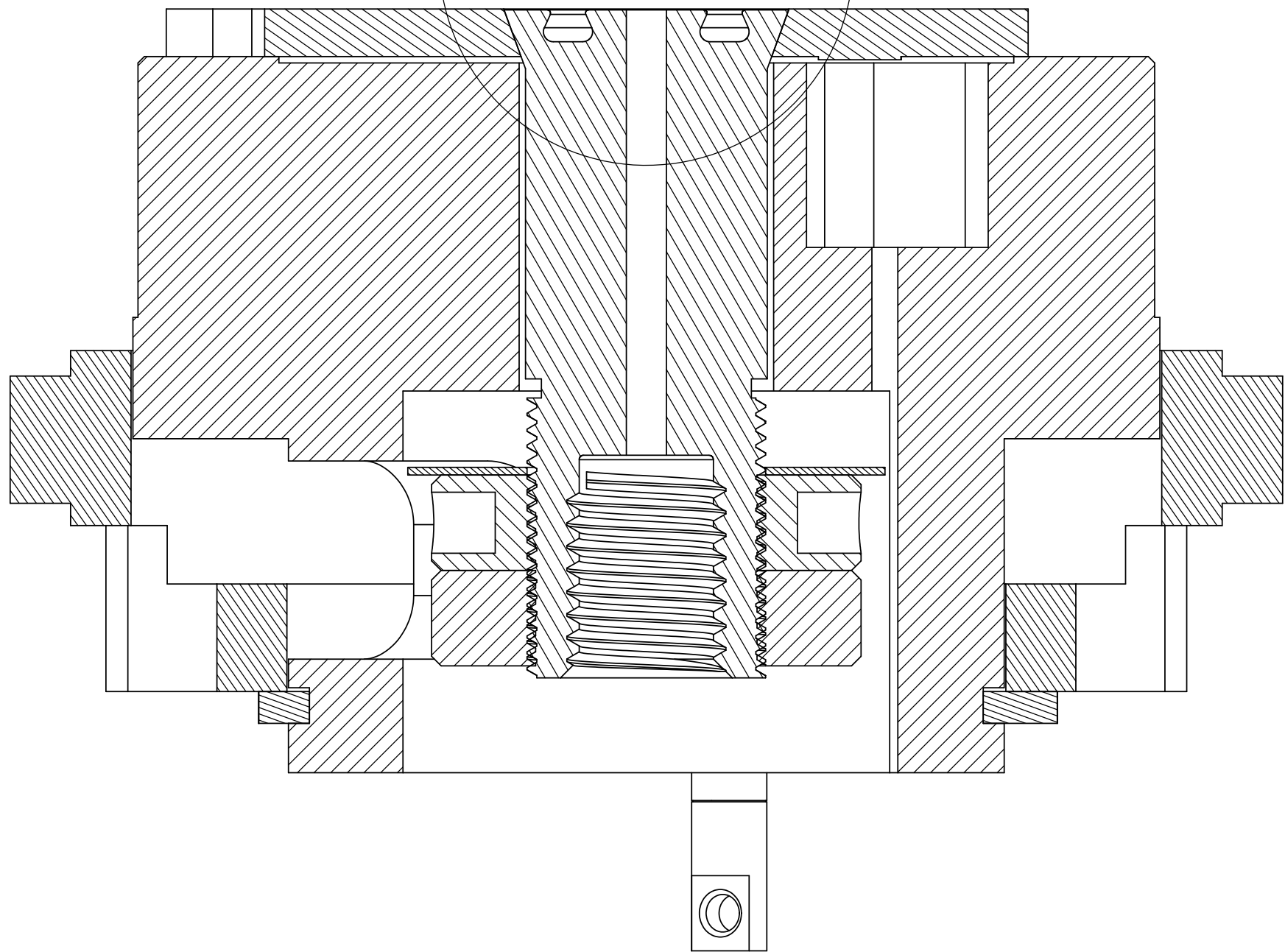
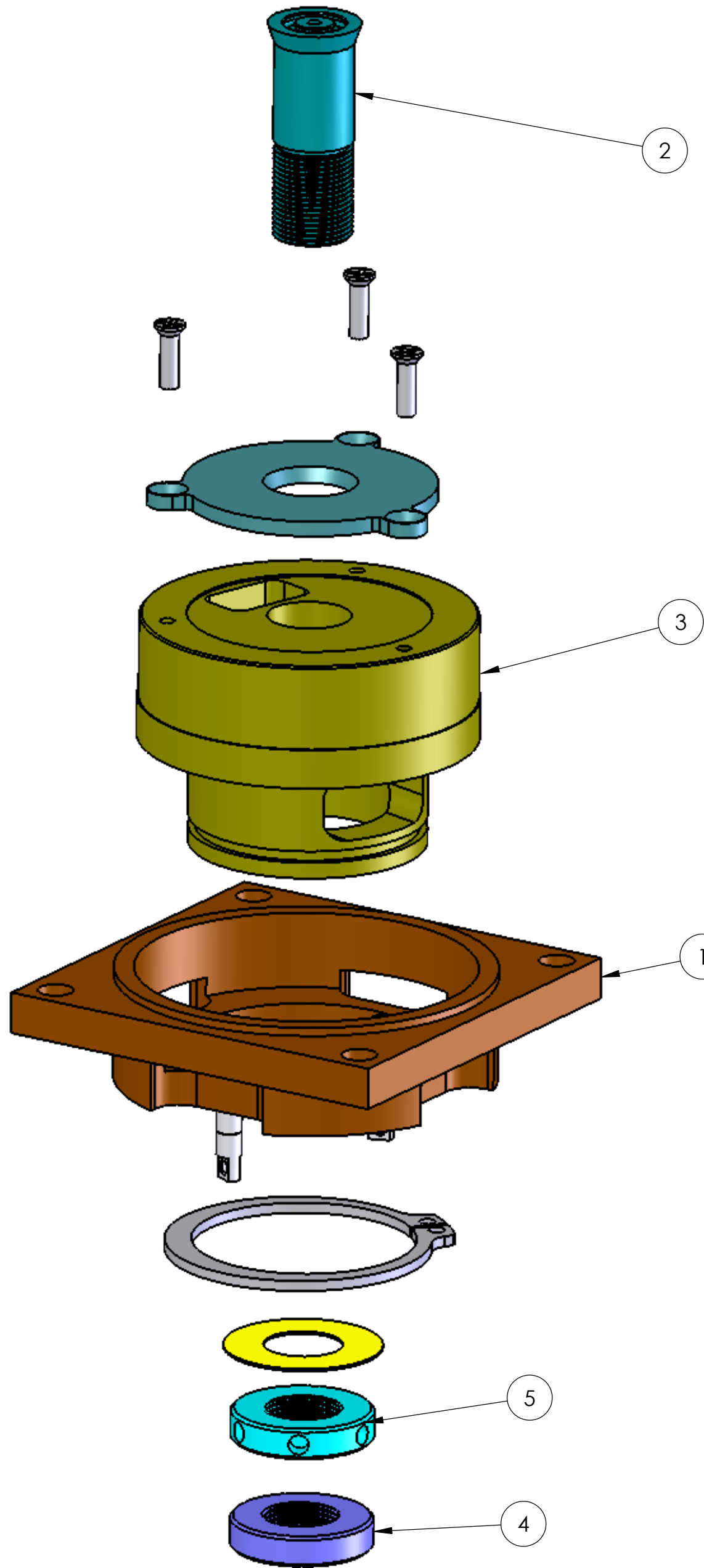
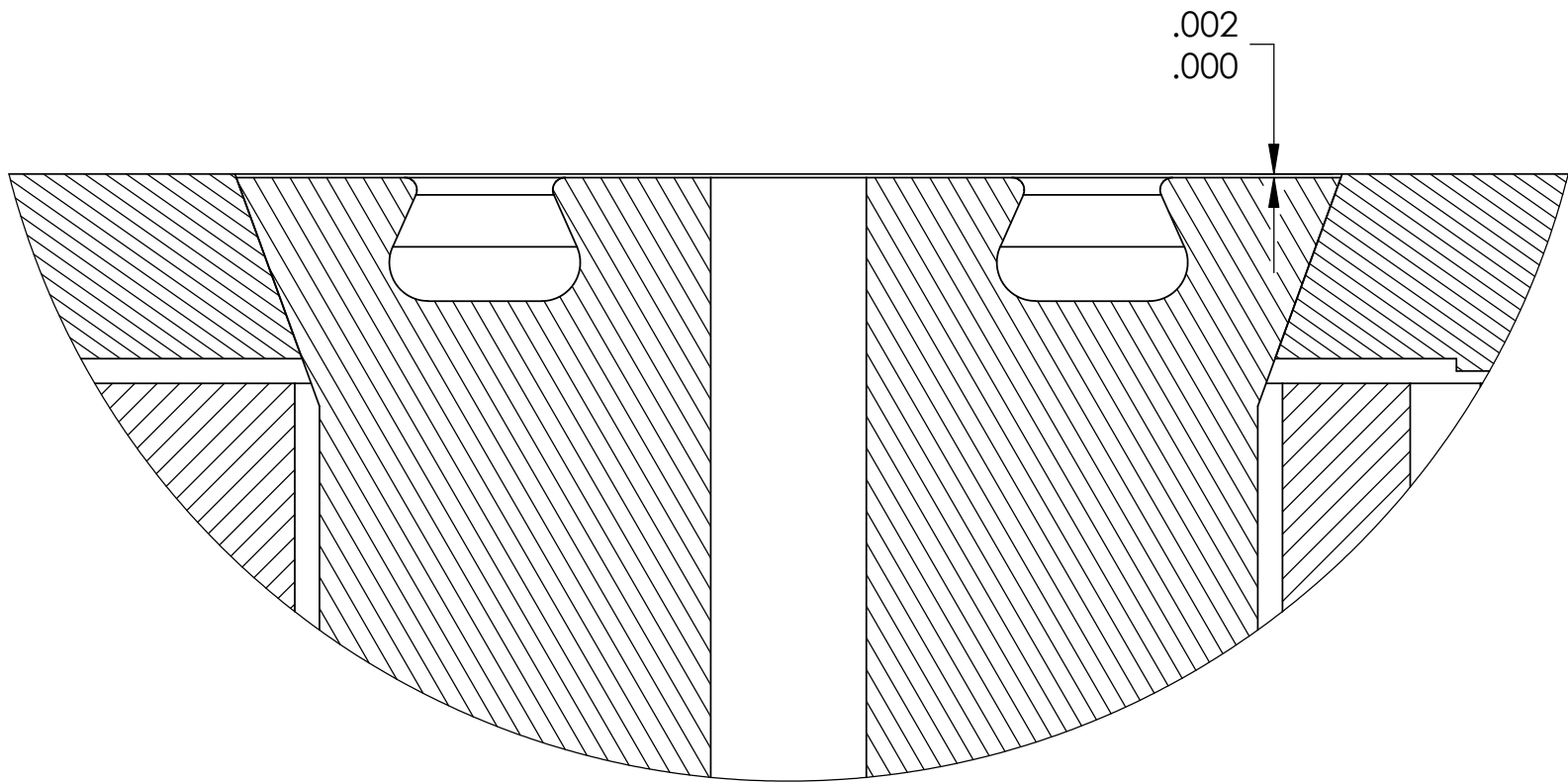
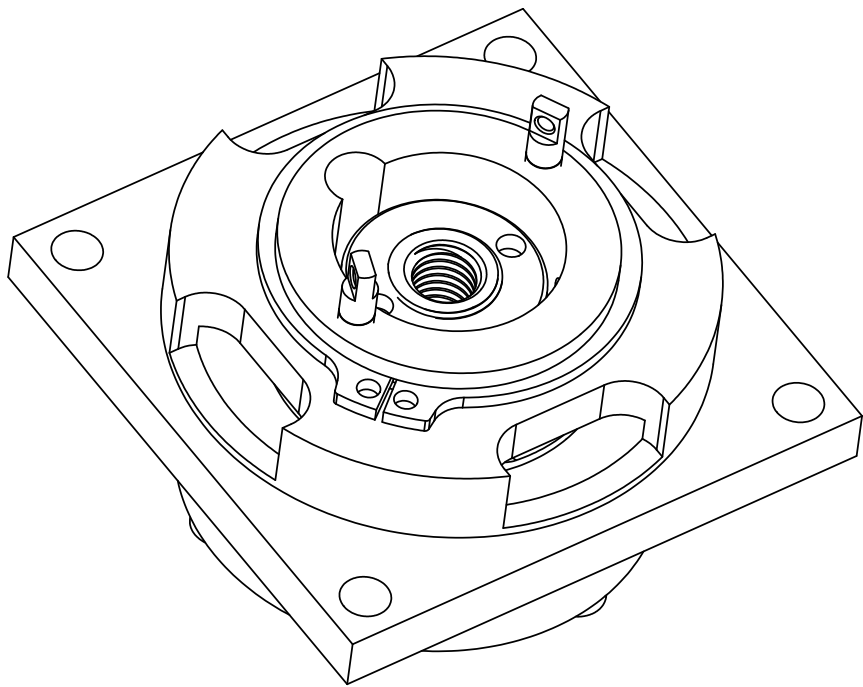
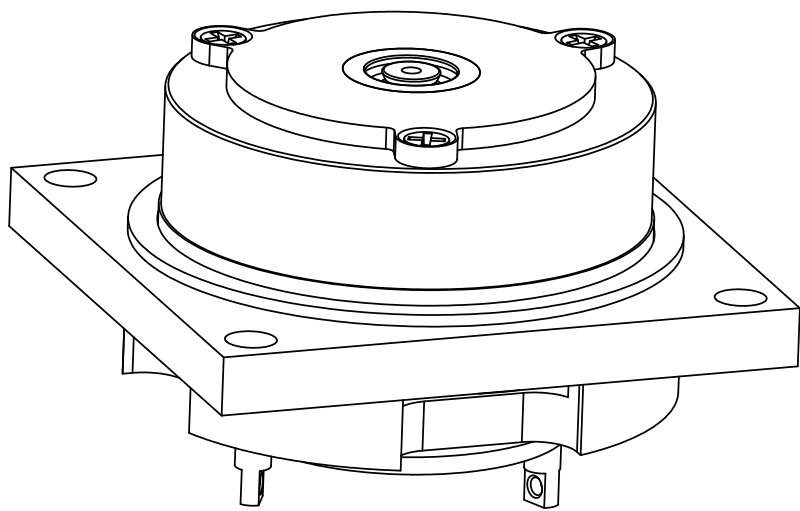


SAMPLE HEATER ASSEMBLY



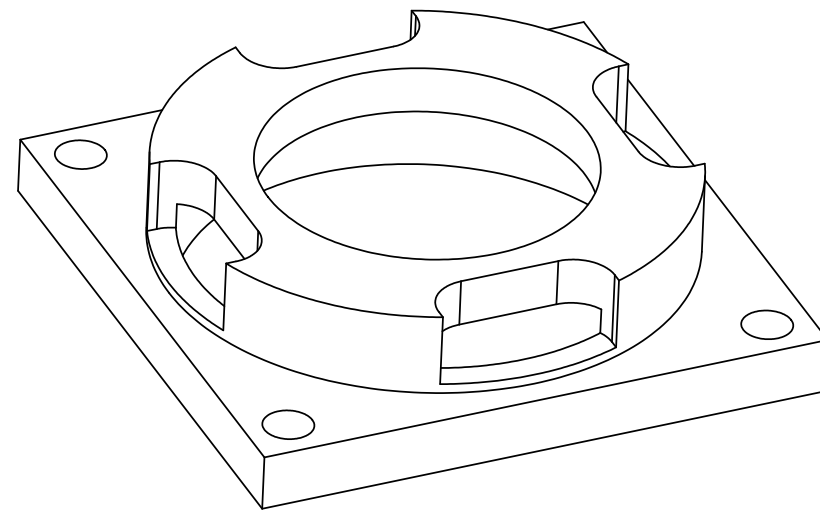
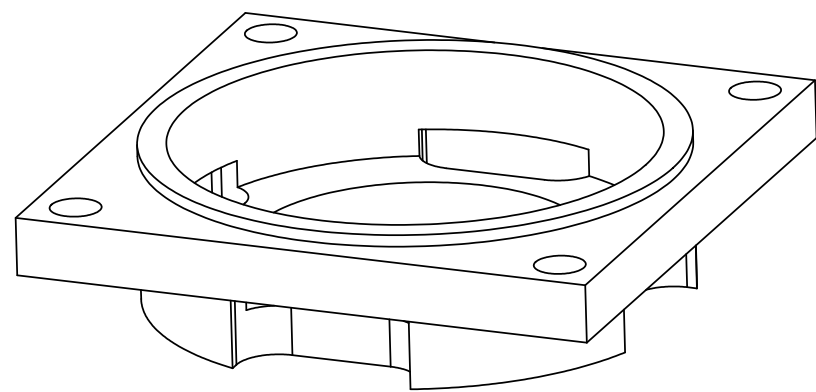
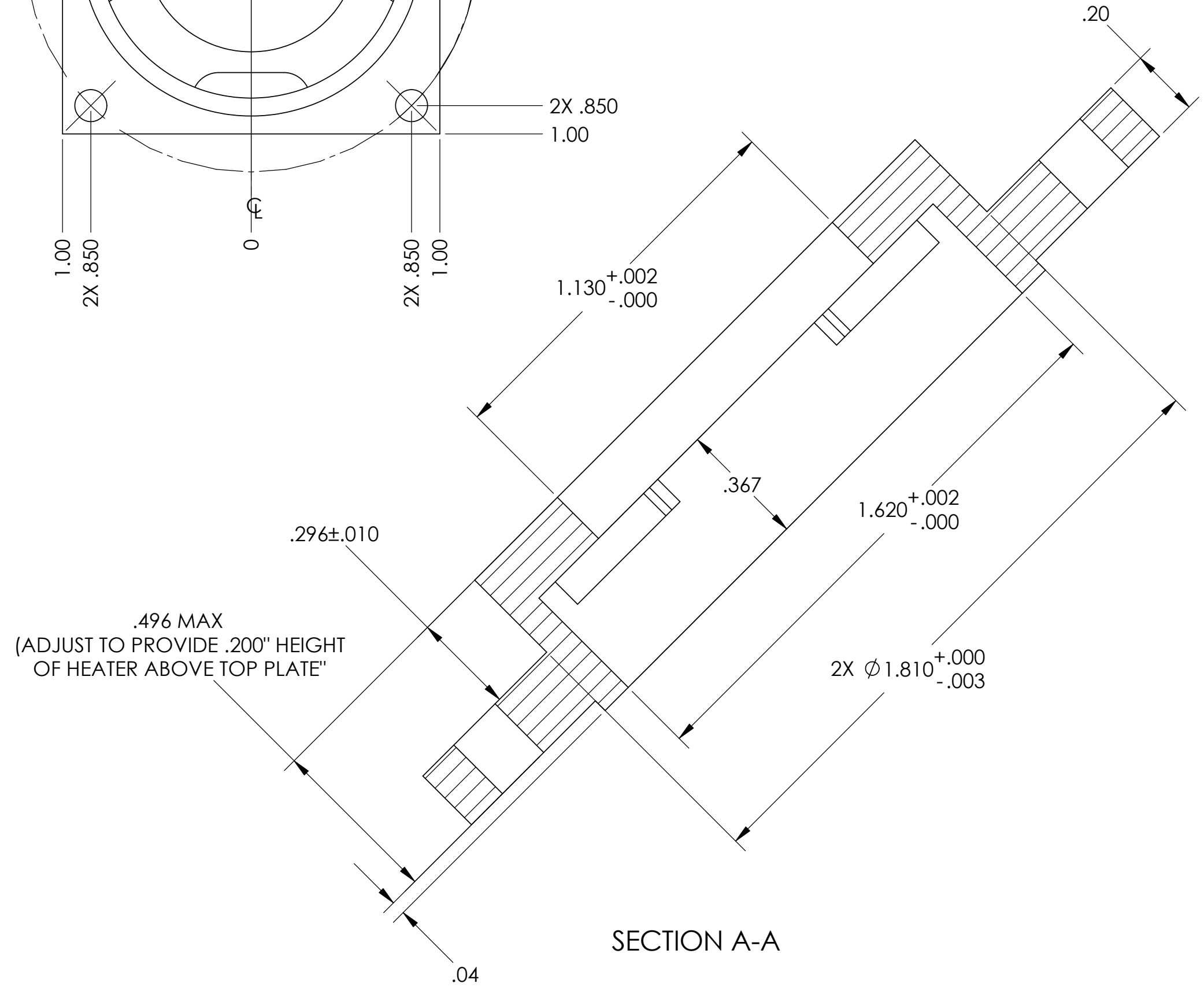
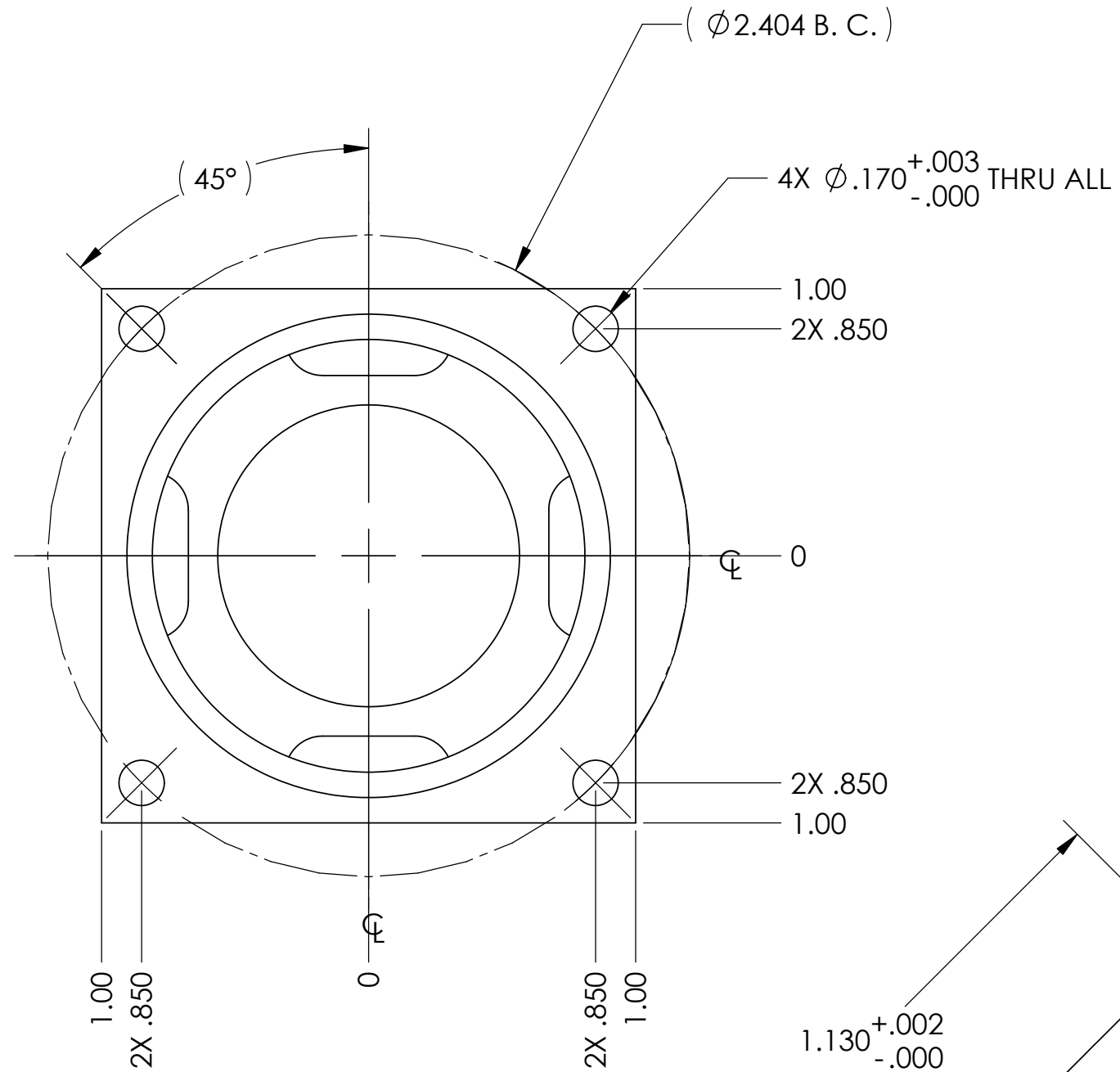
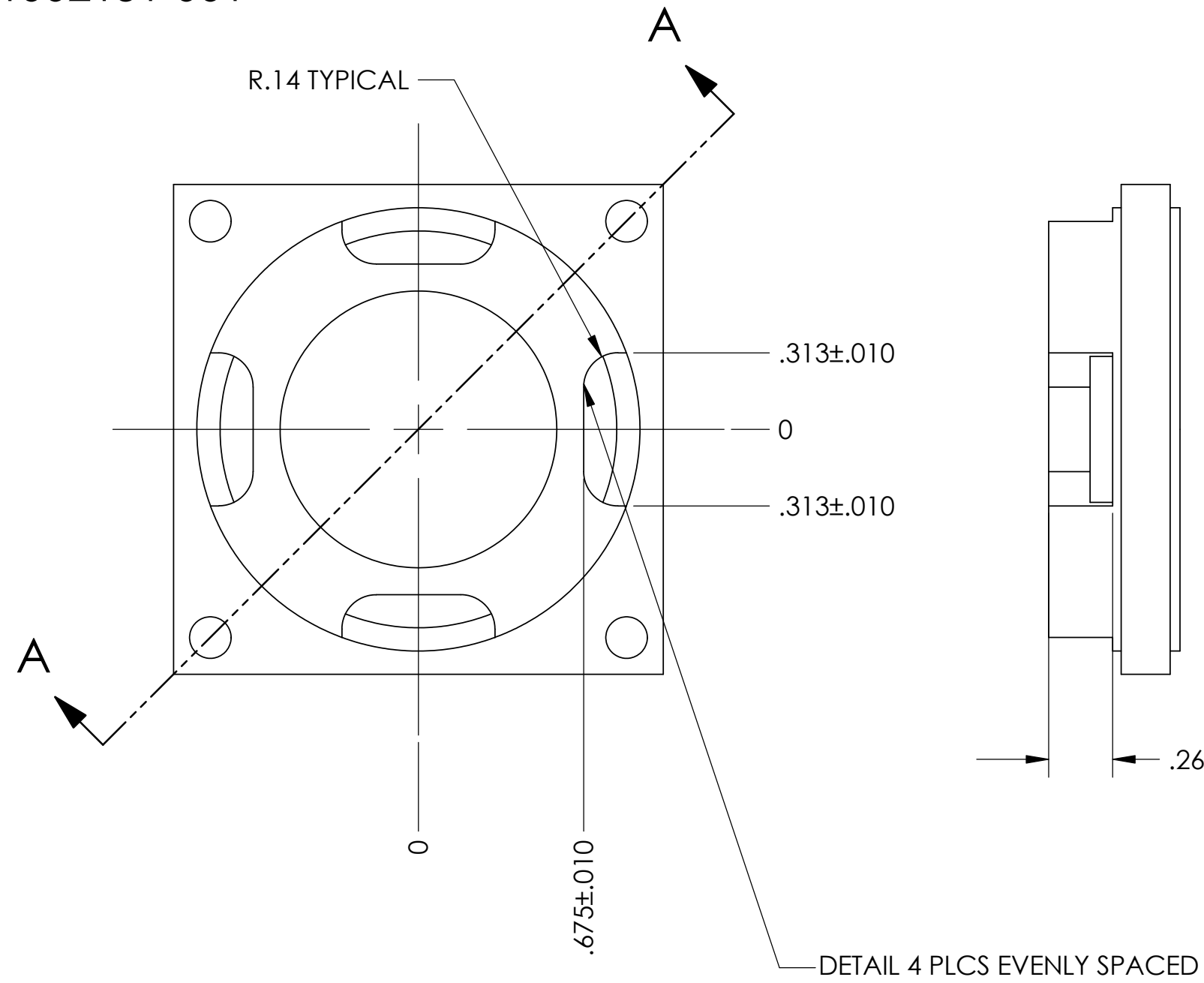
SECTION



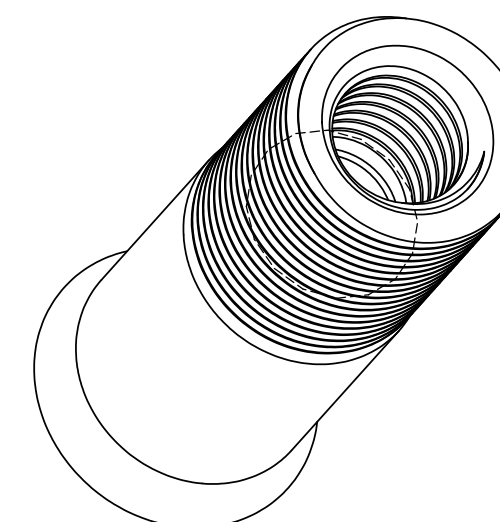
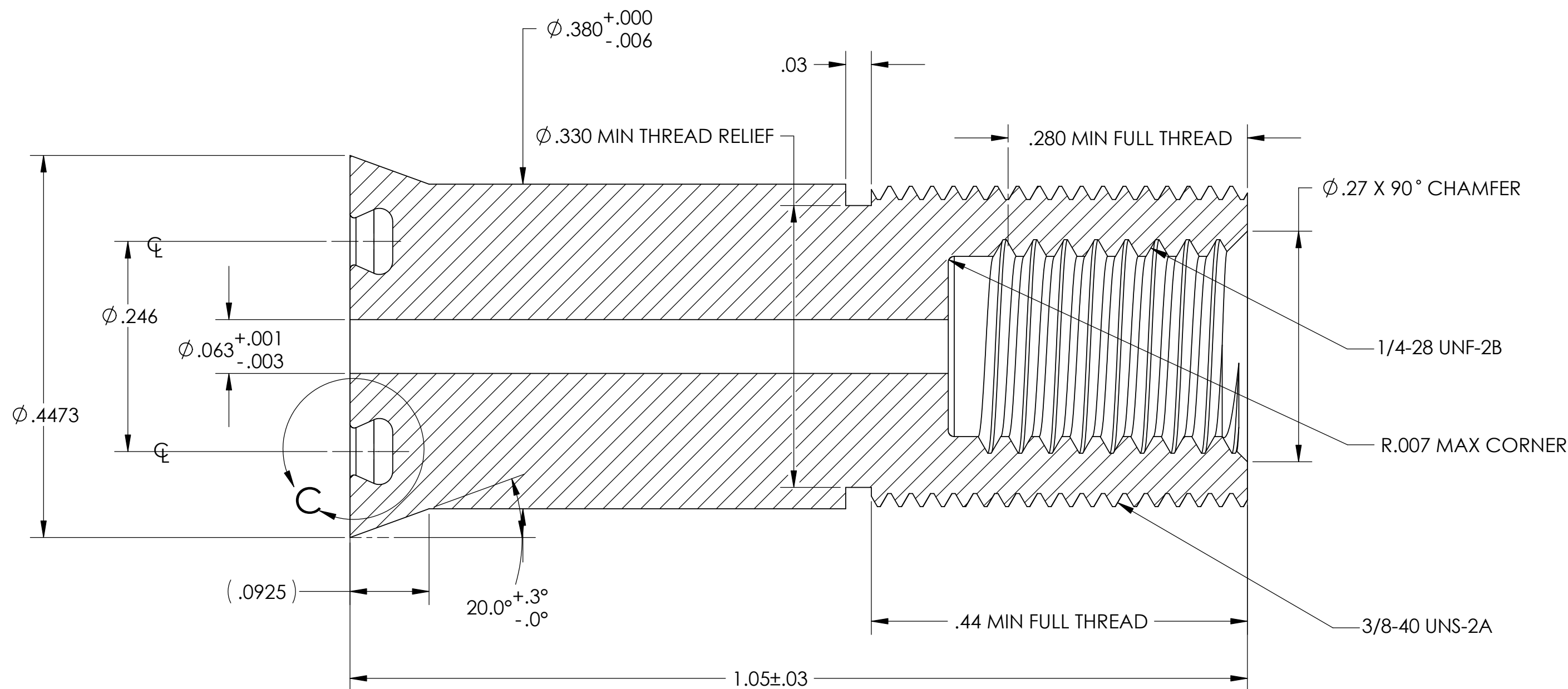
DETAIL

BILL OF MATERIALS					last updated on: Monday, March 28, 2005 2:43:59 PM					
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE	Monterey Bay Aquarium Research Institute			
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005	ANGLES ±1°	ENGINEER Jason Feldman 831-775-1837	7700 Sandholdt Road Moss Landing, CA 95039			
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .015 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .003 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED					M B A Q I			
Engineer							CHECKED		HEATER - MOUNT	
NEXT ASSY Description	NEXT ASSY Number						PROJECT NUMBER 701312.00		SIZE C	
		PROJECT ESP 2G		DWG. NO. 1002131		REV. G				
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)					SHEET 1 OF 6			

HEATER BASE 1002131-001



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1	1002131-001	Sample heater base	Aluminum 6061-T6	0
BILL OF MATERIALS				
Shop / Q.C.		last updated on: Monday, March 28, 2005 2:43:59 PM		
Inspector		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		
Shop Foreman		2 PLACE DIM ±.01 3 PLACE DIM ±.005 4 PLACE DIM ±.0005 ANGLES ±1°		
Engineer		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .015 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX. .003 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED		
NEXT ASSY Description	NEXT ASSY Number	APPROVALS DATE ENGINEER Jason Feldman 831-775-1837 CHECKED PROJECT NUMBER 701312.00 PROJECT ESP 2G		
DO NOT SCALE DRAWING		CADD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209) SHEET 2 OF 6		
		Monterey Bay Aquarium Research Institute 7700 Sandholdt Road Moss Landing, CA 95039 HEATER - MOUNT SIZE C DWG. NO. 1002131 REV. G		



TO UTILIZE O-RING:
material: BUNA-N
durometer: 70 Shore A
size: 2-008

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
2	1002131-002	taper fit fluid fluid connection	Vespel SP-1	1
3	1002131-002	taper fit fluid fluid connection	Celazole	1

BILL OF MATERIALS				last updated on: Monday, March 28, 2005 2:43:59 PM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE	
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005	ANGLES ±1°
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .015 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			
Engineer		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH MAX .003 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED			
NEXT ASSY Description	NEXT ASSY Number	PROJECT NUMBER		HEATER - MOUNT	
		701312.00		SIZE	DWG. NO.
		PROJECT ESP 2G		C	1002131
DO NOT SCALE DRAWING		CAD FILE: X:\201312 ESP 2G\SolidWorks files\internal structure (1002209)		REV. C	



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Moss Landing, CA 95039

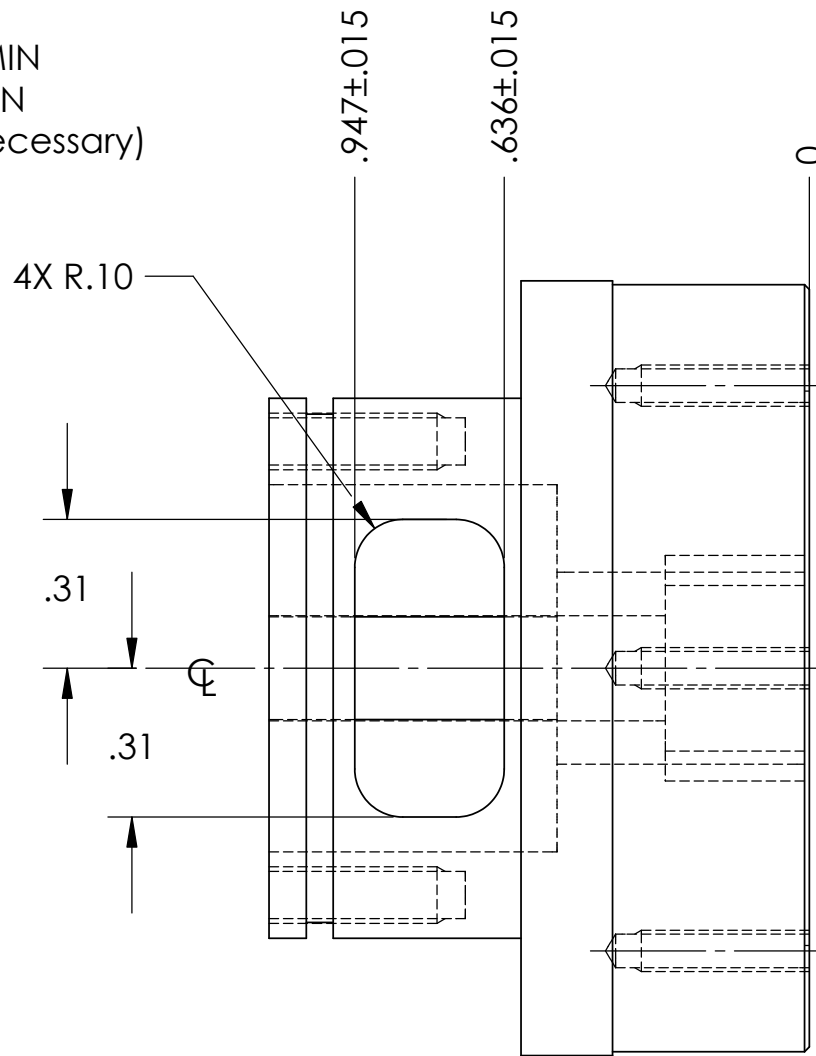
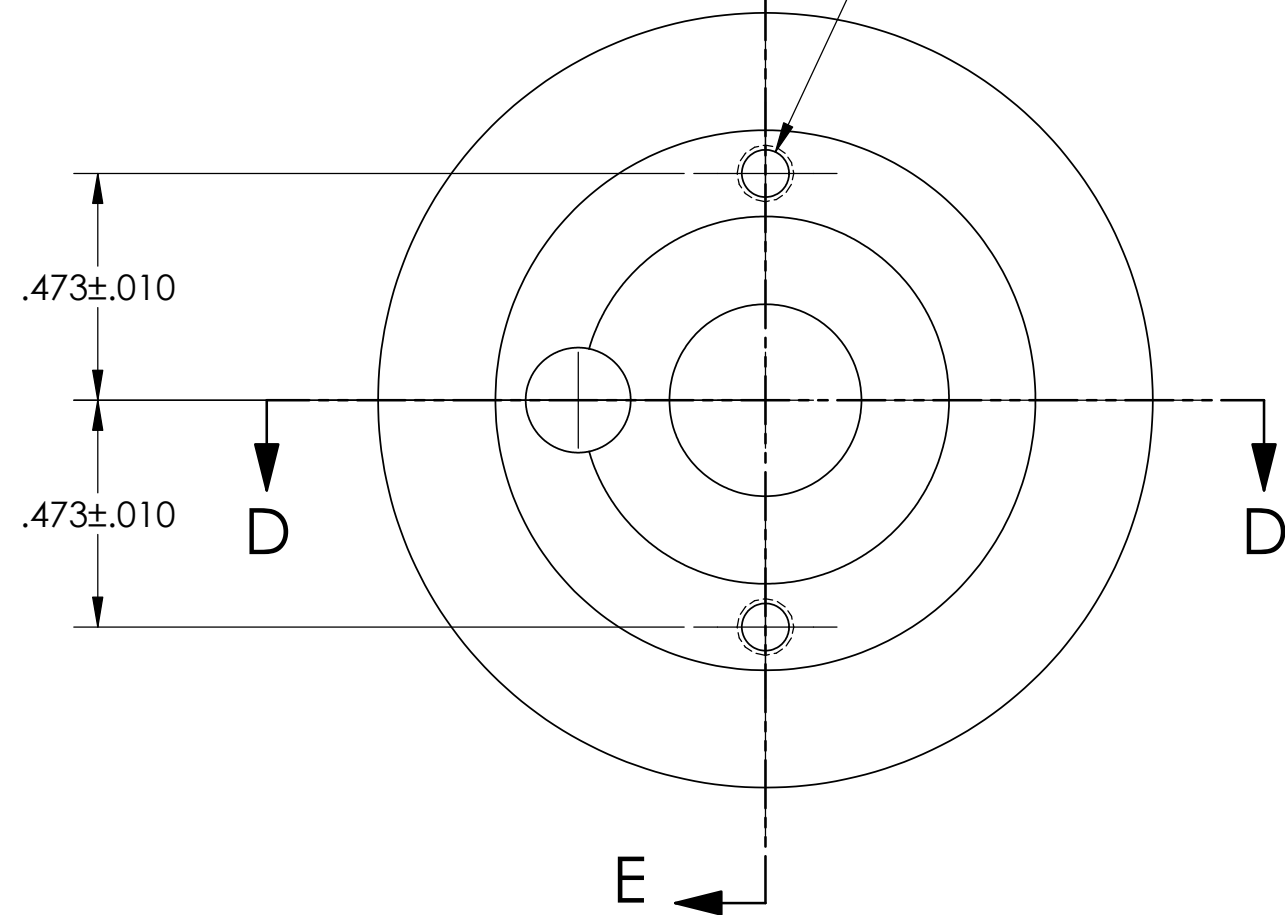
SHEET 3 OF 4

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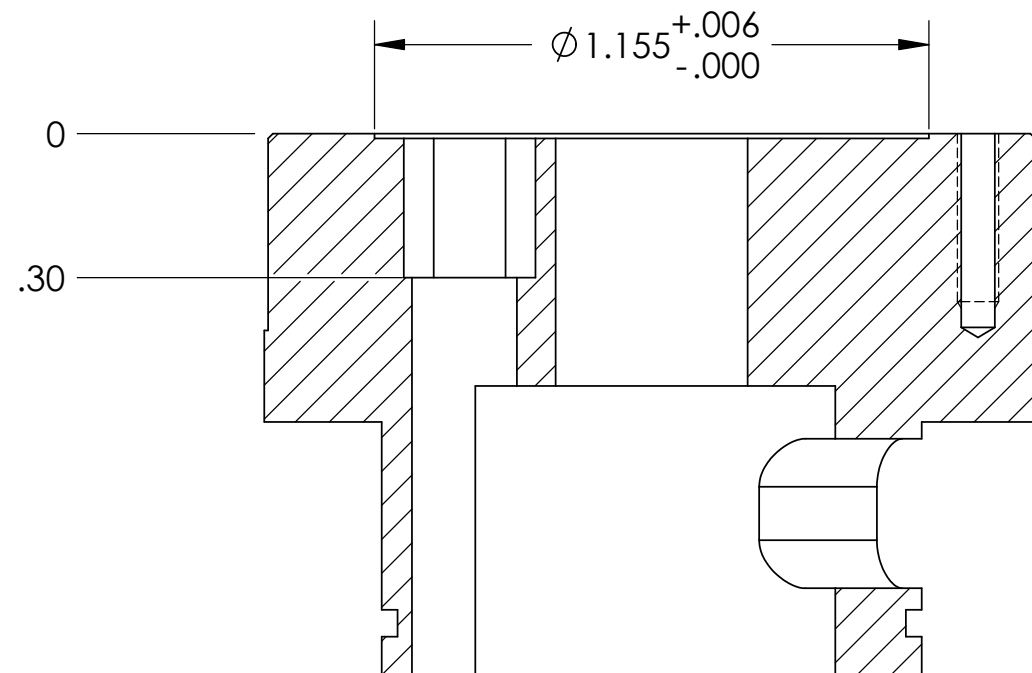
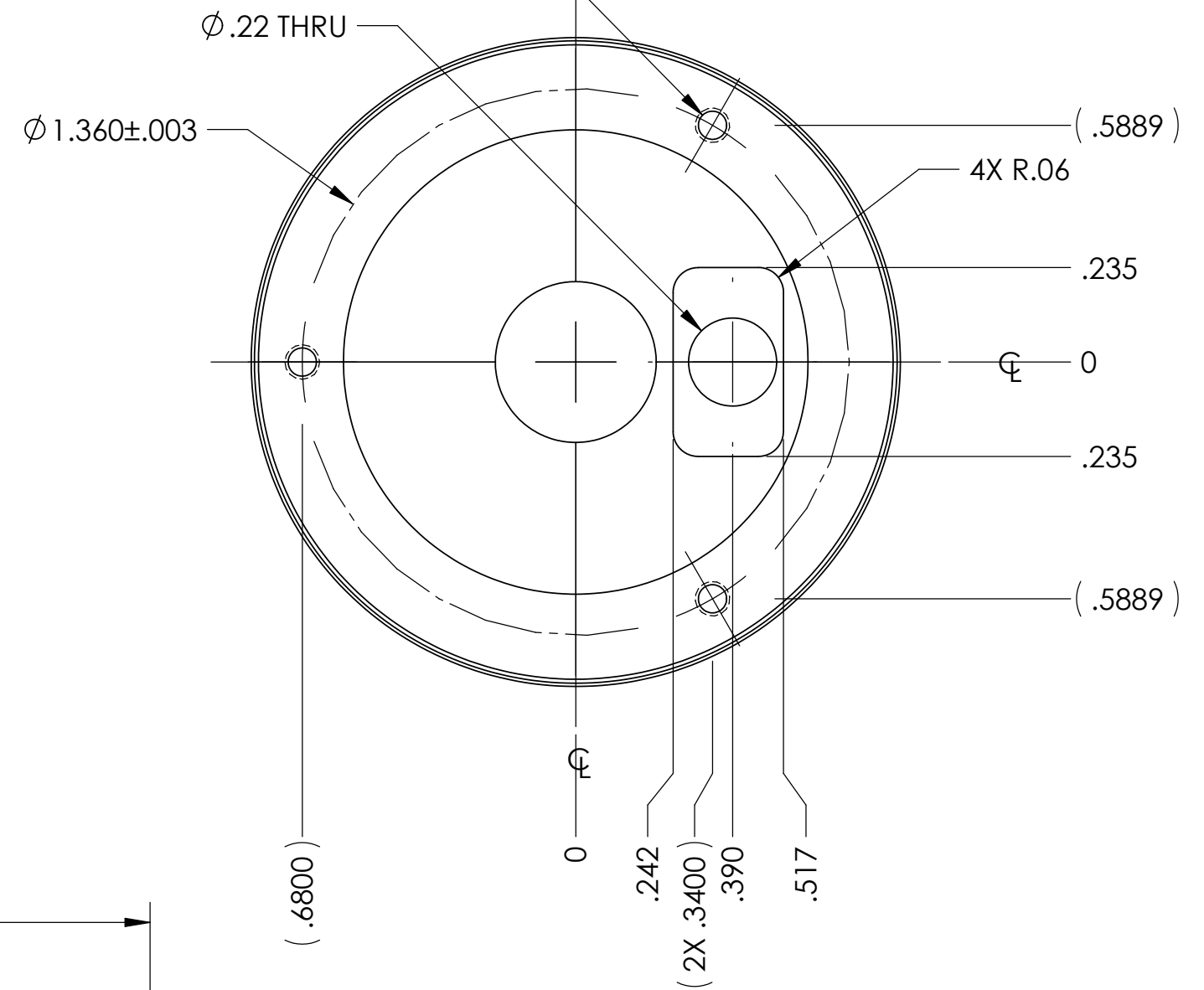
WATLOW HEATER MOUNT

1002131-003

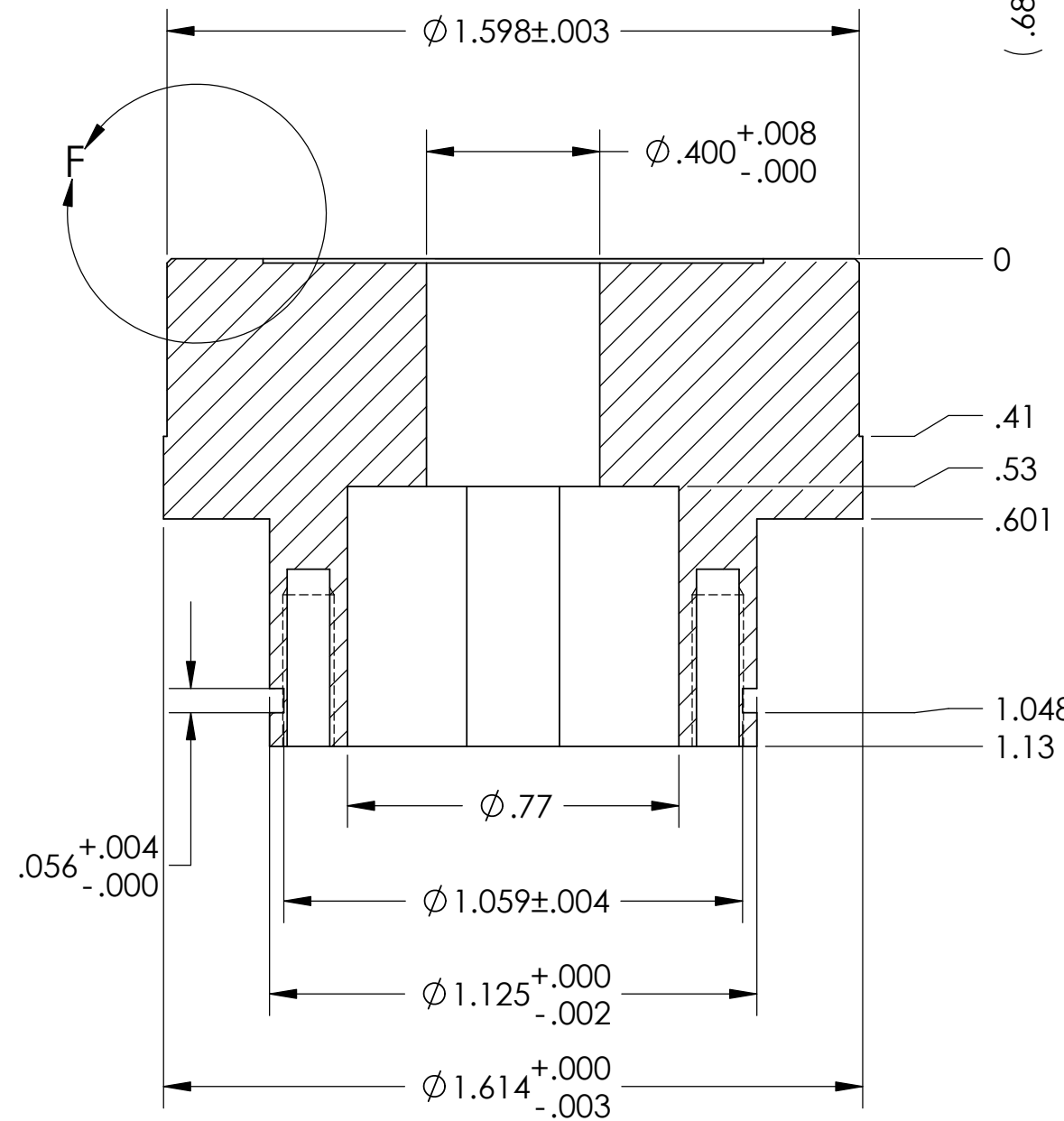
2X $\phi .098 \nabla .40 \text{ MIN}$
M3 - 6H $\nabla .35 \text{ MIN}$
(precise location not necessary)



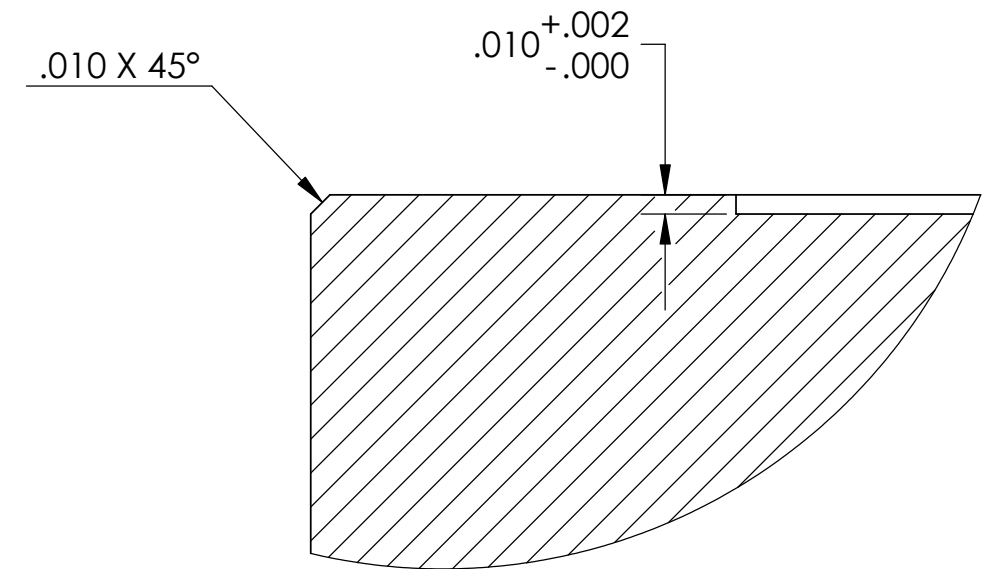
3X $\phi .070 \nabla .404 \text{ MIN}$
2-56 UNC - 2B $\nabla .350 \text{ MIN}$
3 PLCS EVENLY SPACED



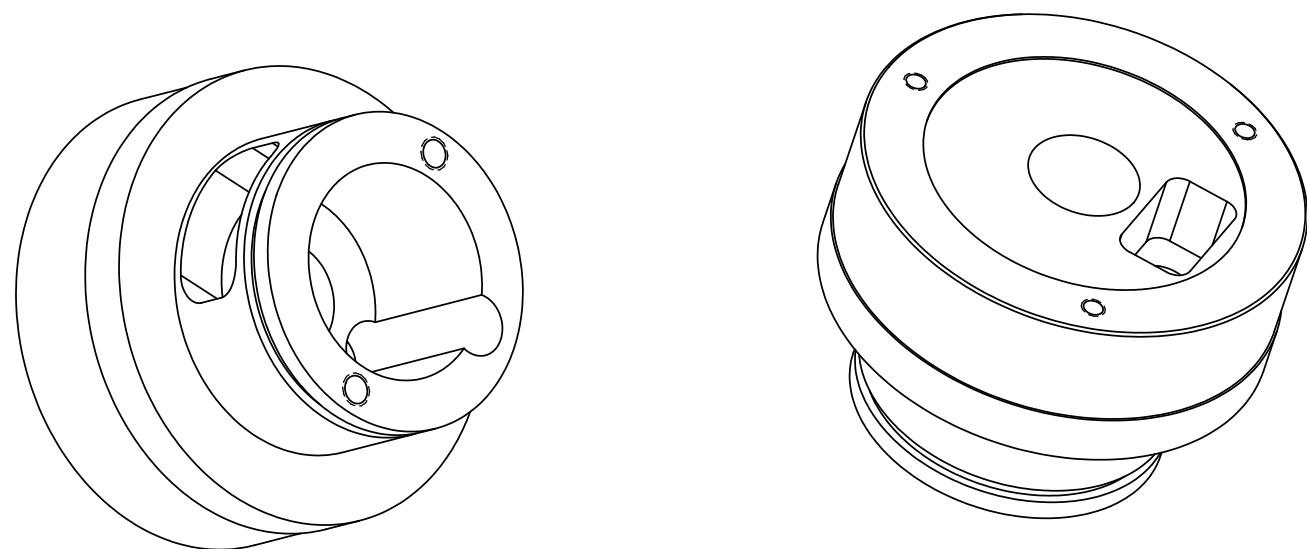
SECTION D-D



SECTION E-E



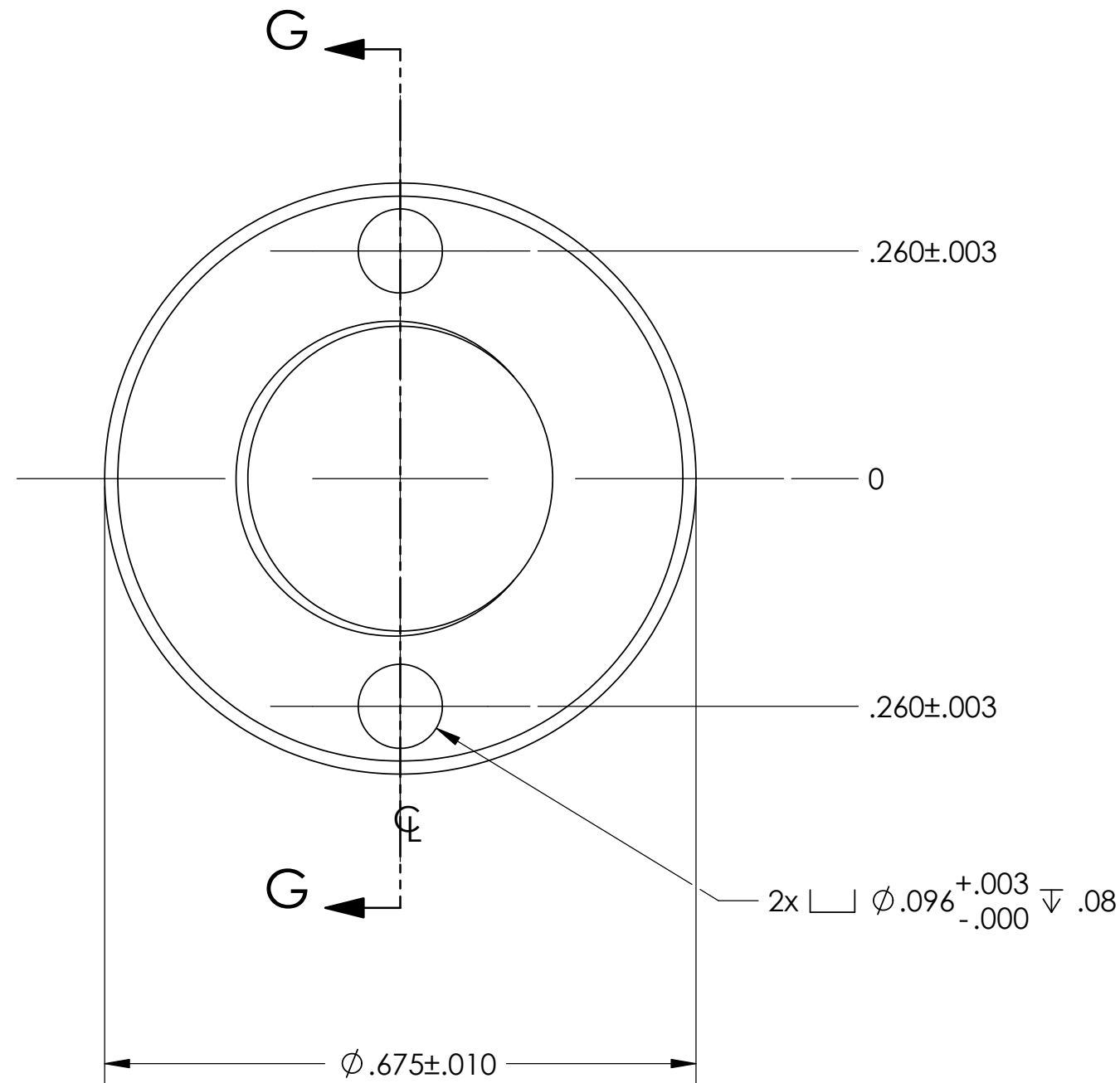
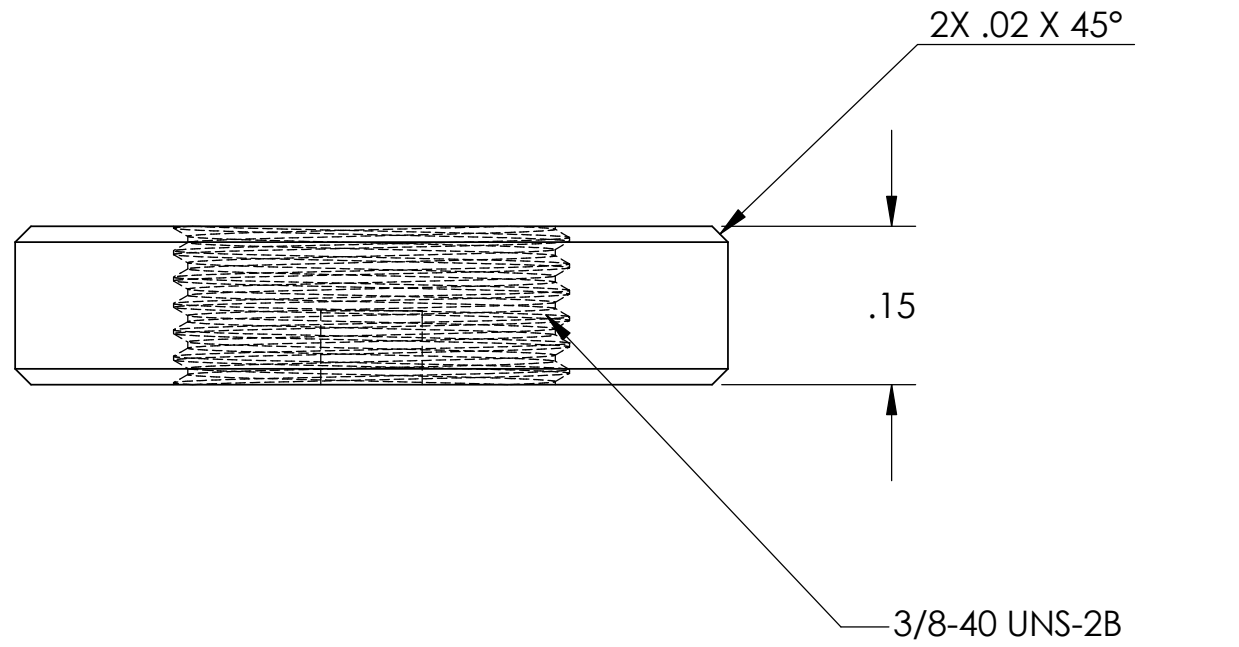
DETAIL F



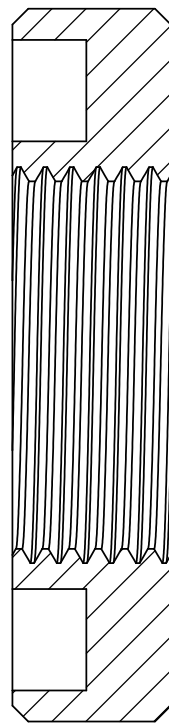
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
4	1002131-003	Watlow heater mount	PEEK	0
BILL OF MATERIALS				
Shop / Q.C.		last updated on: Monday, March 28, 2005 2:43:59 PM		
Inspector		APPROVALS DATE		
Shop Foreman		ENGINEER Jason Feldman 831-775-1837		
Engineer		CHECKED		
NEXT ASSY Description	NEXT ASSY Number	PROJECT NUMBER 701312.00		
		PROJECT ESP 2G		
		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)		
		HEATER - MOUNT		
		SIZE C	DWG. NO. 1002131	REV. H
		SHEET 4 OF 6		

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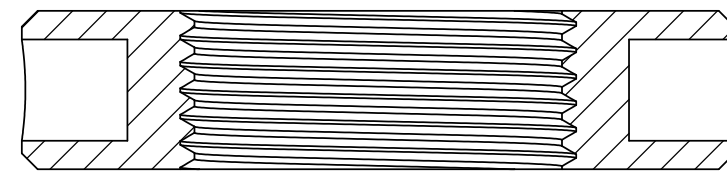
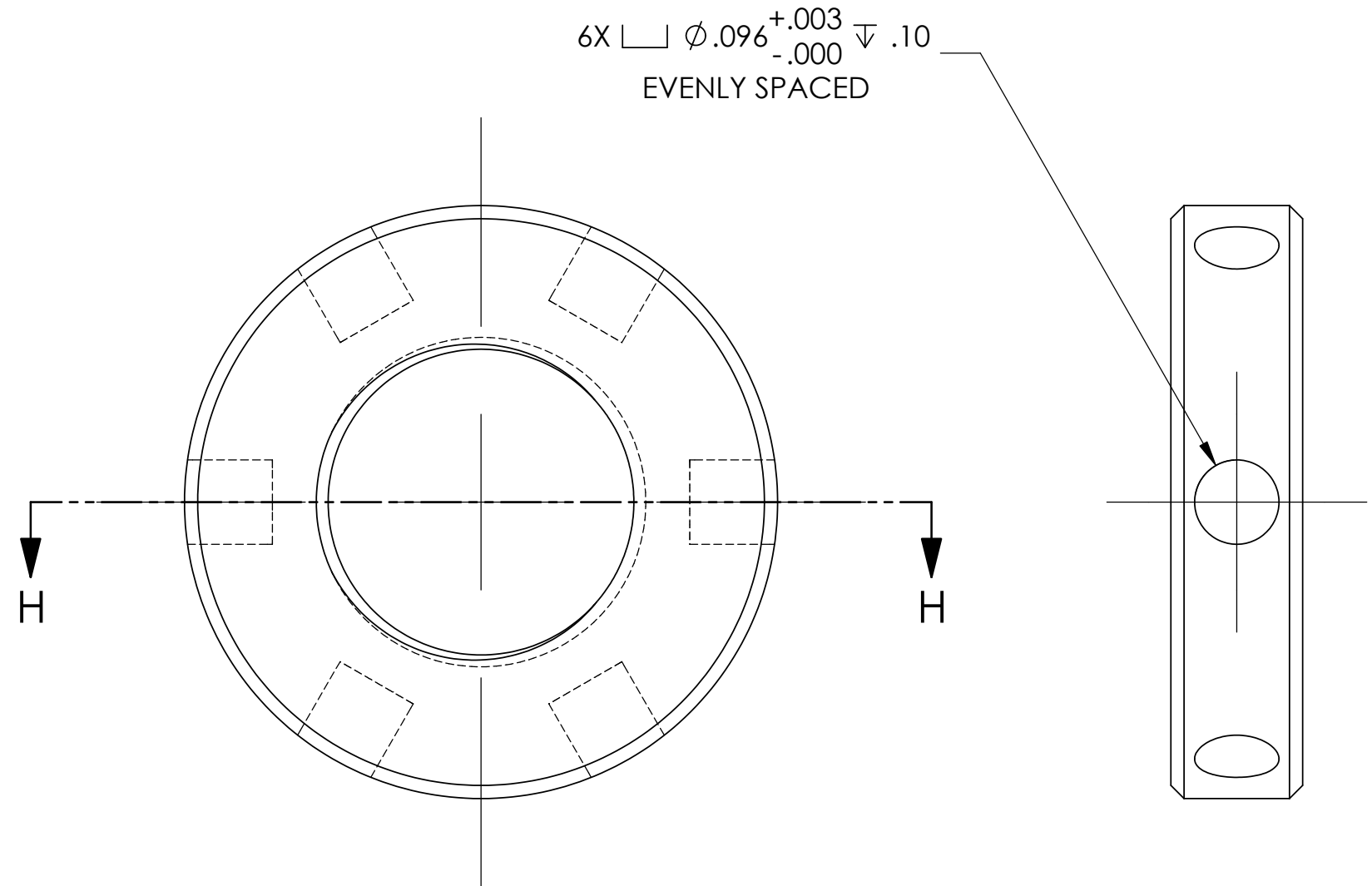
3/8 - 40 nut (lower)
1002131-004



SECTION G-G



3/8 - 40 nut (upper)
1002131-005



SECTION H-H

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
4	1002131-004	3/8 - 40 nut (lower)	17-4 Stainless Steel	2
5	1002131-005	3/8 - 40 nut (upper)	17-4 Stainless Steel	2

BILL OF MATERIALS				last updated on: Monday, March 28, 2005 2:43:59 PM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE	
Inspector		2 PLACE DIM $\pm .01$	3 PLACE DIM $\pm .005$	4 PLACE DIM $\pm .0005$	ANGLES $\pm 1^\circ$
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .015 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .003 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED		ENGINEER Jason Feldman 831-775-1837	
Engineer				CHECKED	
NEXT ASSY Description	NEXT ASSY Number	PROJECT NUMBER 701312.00		PROJECT ESP 2G	
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)		SHEET 5 OF 6	

Monterey Bay Aquarium Research Institute
7700 Sandholdt Road
Moss Landing, CA
95039



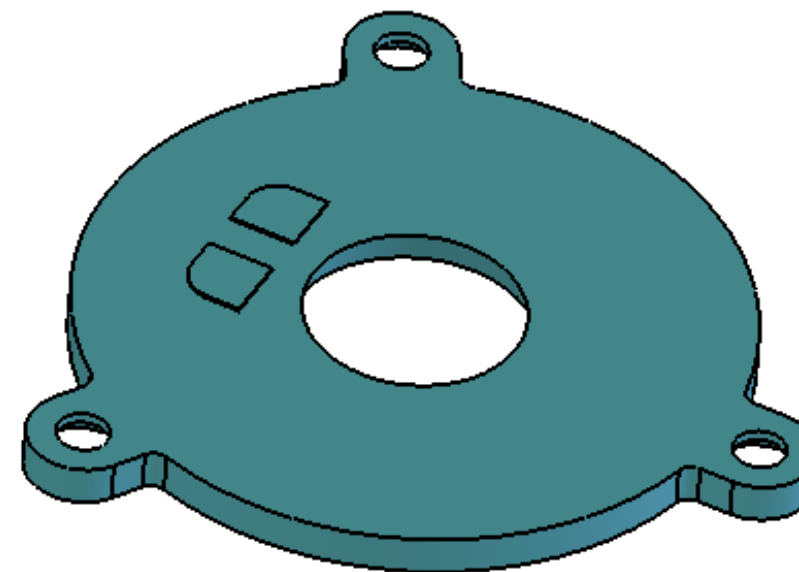
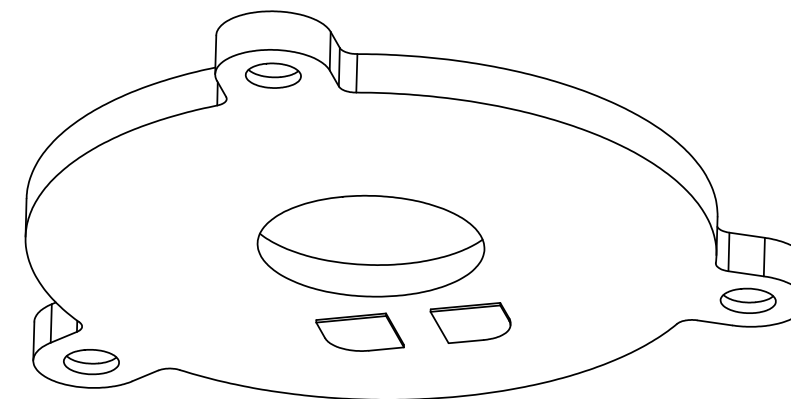
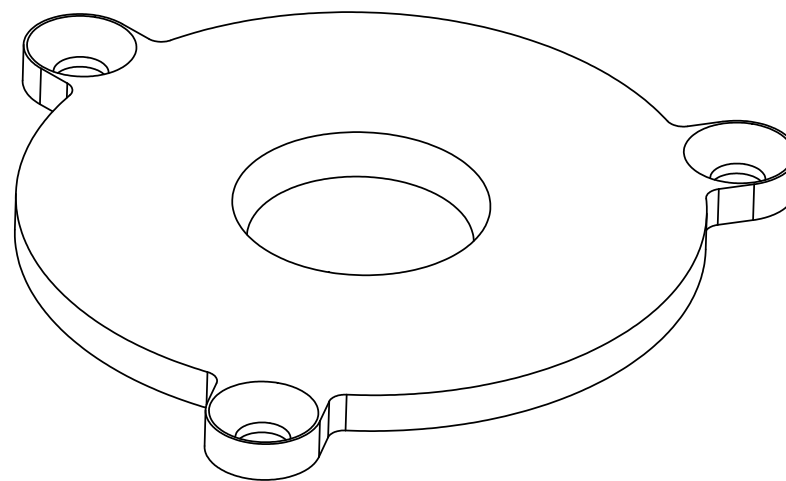
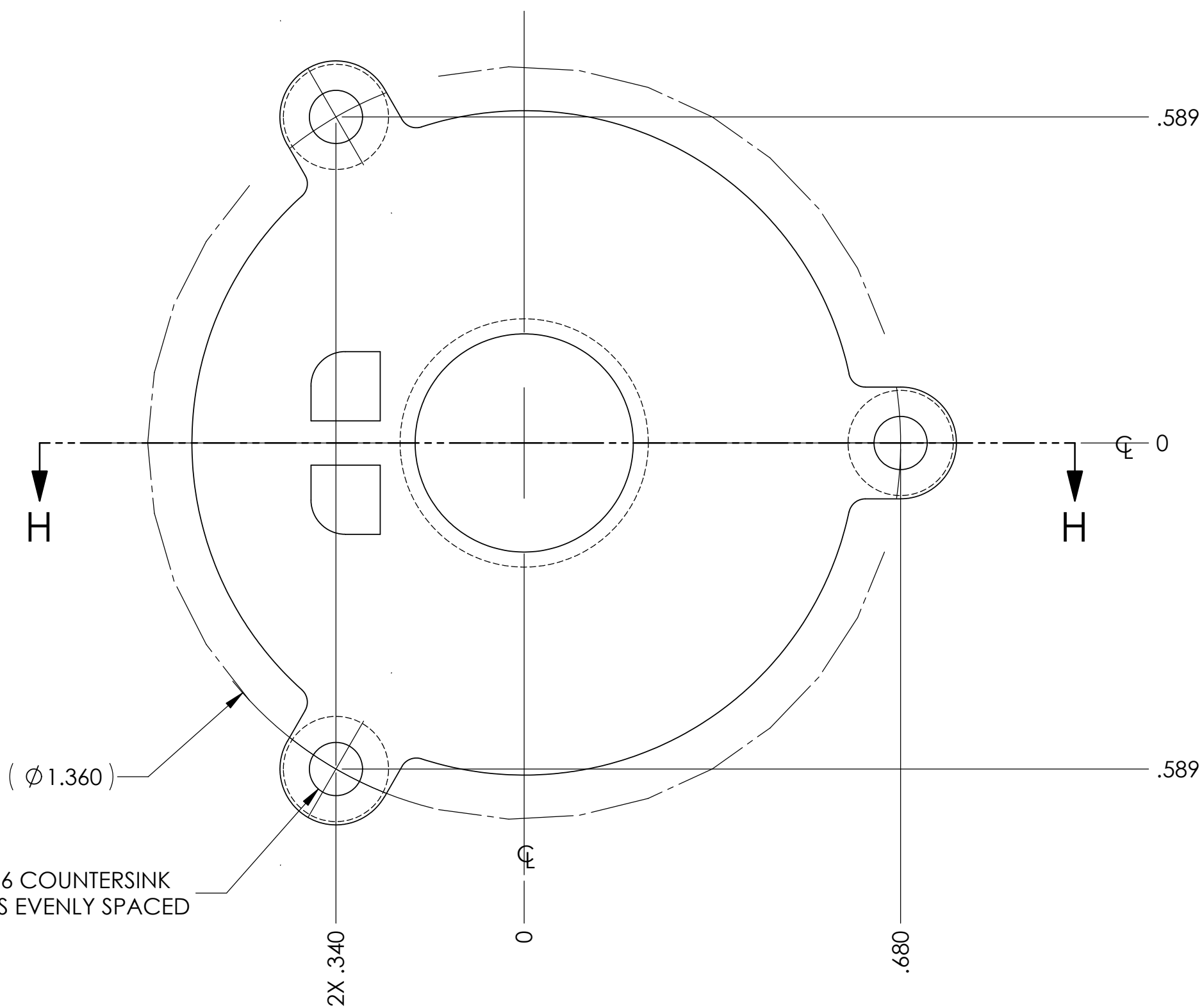
HEATER - MOUNT

SIZE C DWG. NO. 1002131 REV. G

WATLOW HEATER (MODIFICATIONS)



SECTION H-H



BILL OF MATERIALS				last updated on: Monday, March 28, 2005 2:43:59 PM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE	
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005	ANGLES ±1°
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .000 TO .015 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .003 INCHES FOR SINGLE SURFACE.			
Engineer					
NEXT ASSY Description	NEXT ASSY Number	PROJECT NUMBER 701312.00			
		PROJECT ESP 2G		SIZE C	DWG. NO. 1002131
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)			REV. G
Monterey Bay Aquarium Research Institute 7700 Sandholdt Road Moss Landing, CA 95039 					
HEATER - MOUNT					
SHEET 6 OF 6					