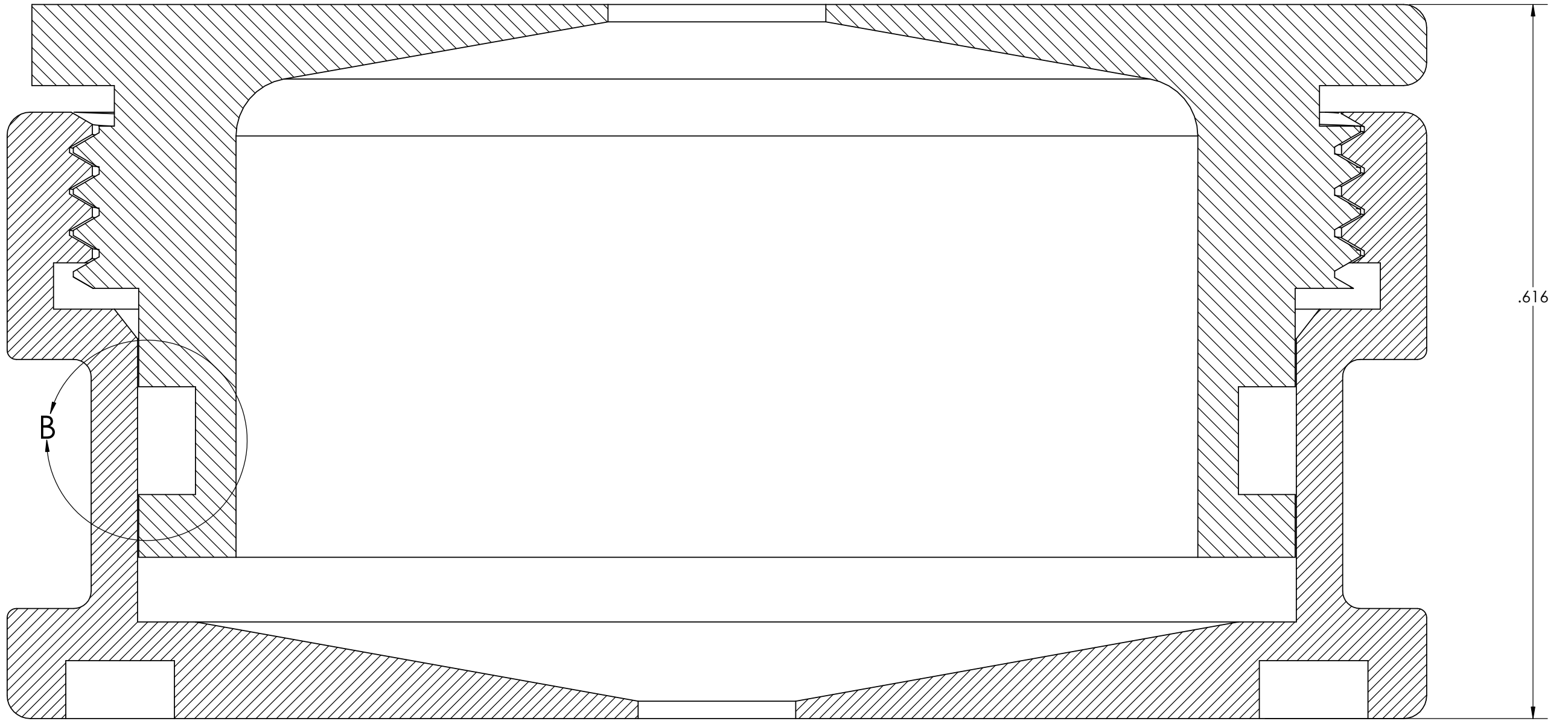
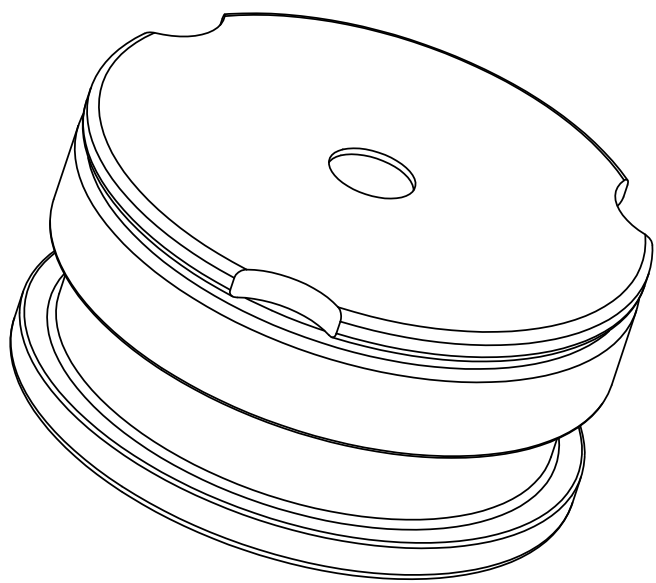
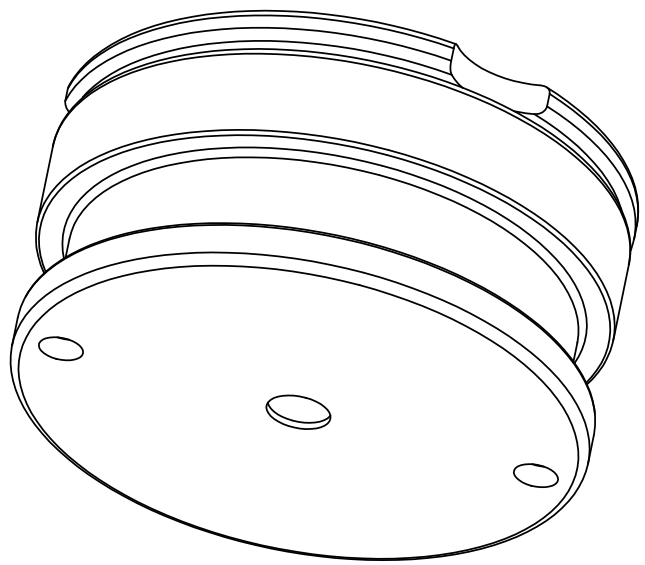
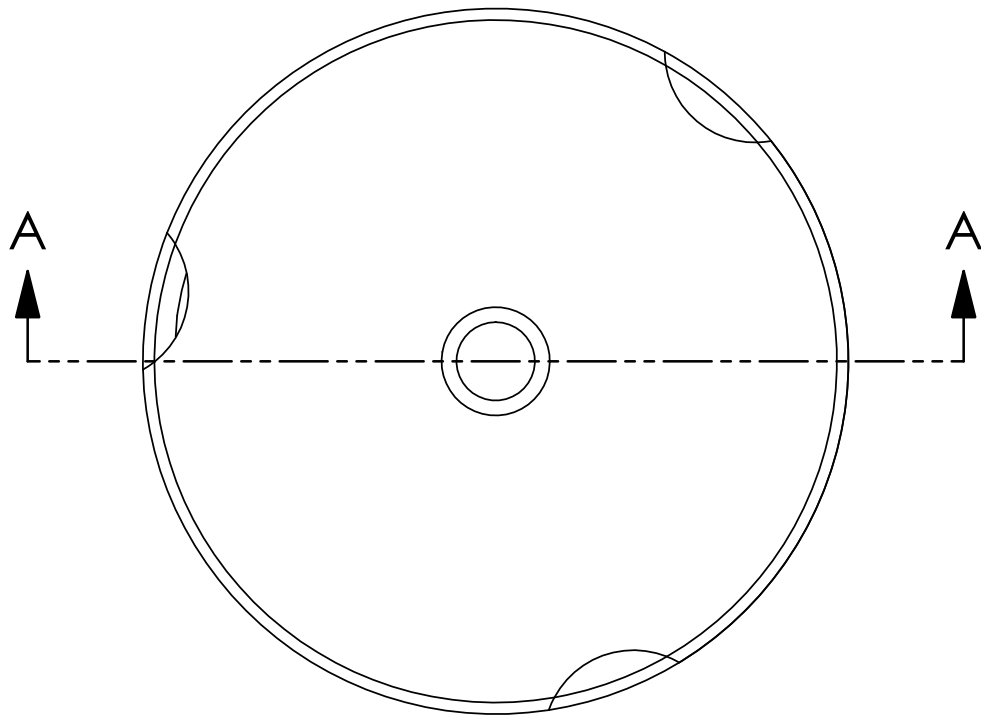
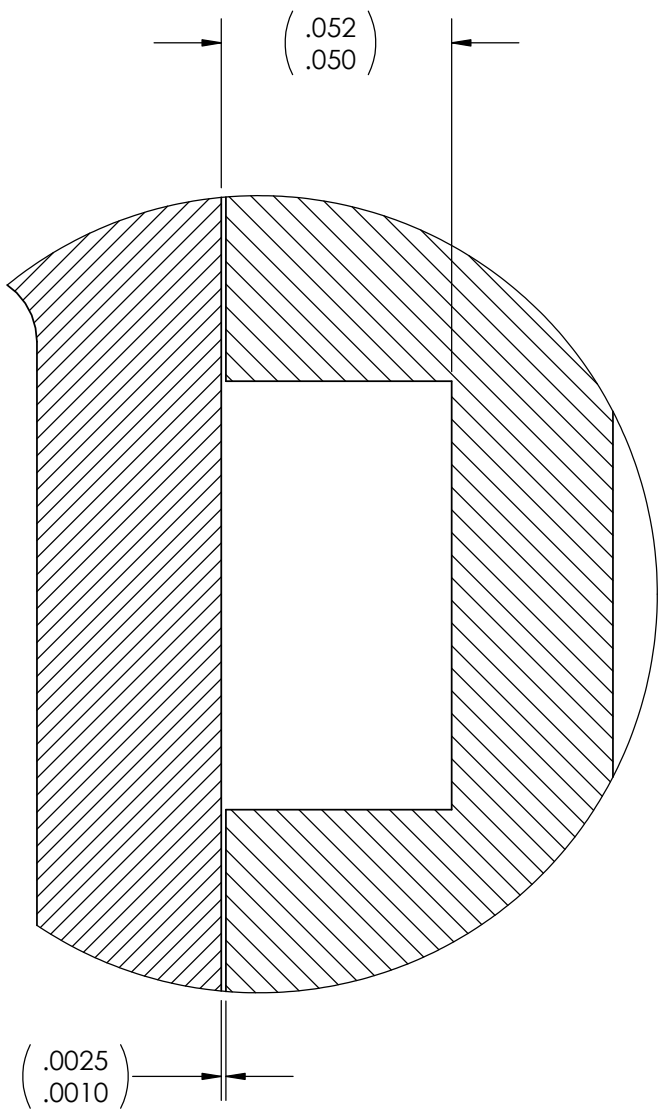


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SECTION A-A



DETAIL B

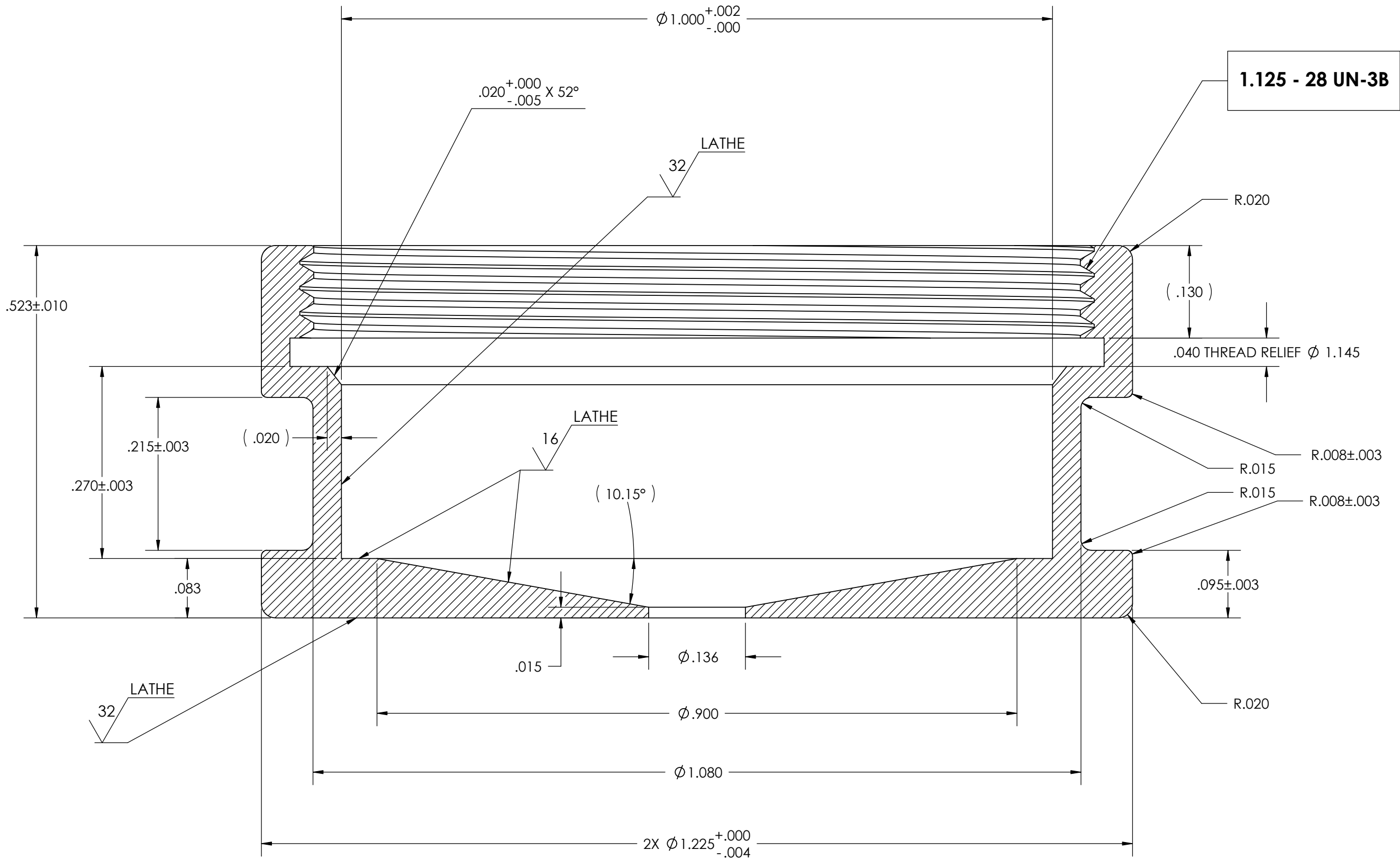
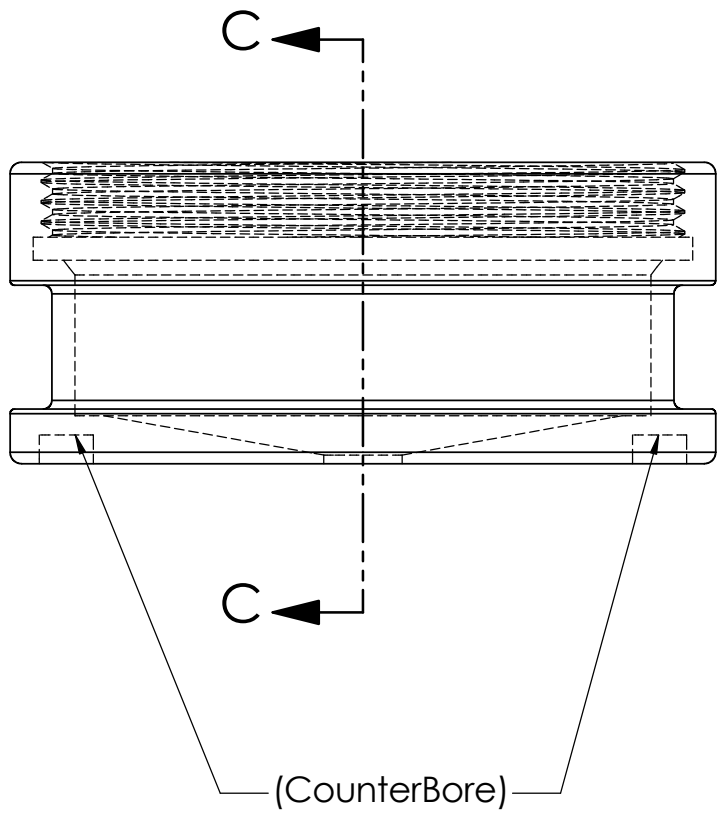
to utilize #2-020 O-ring
1.004 Mean OD x 0.070 Width
material: Buna-N
durometer: 70 Shore A

O-RING COMPRESSION:
MIN: 26%
MAX: 29%

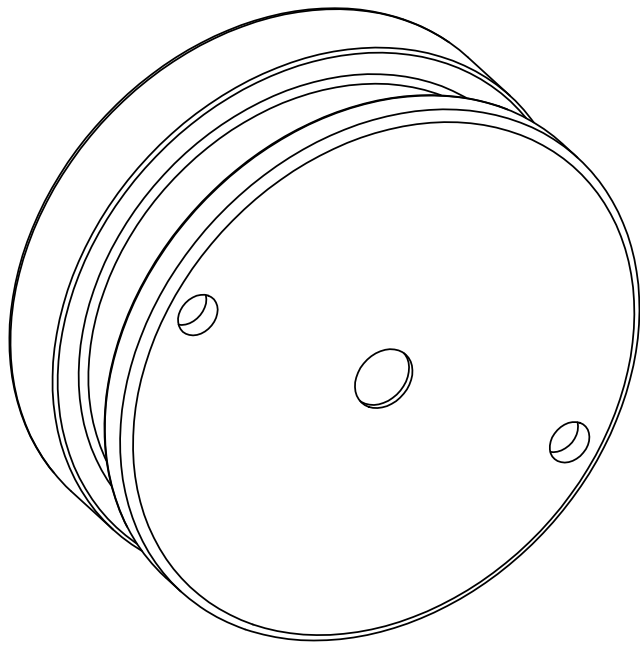
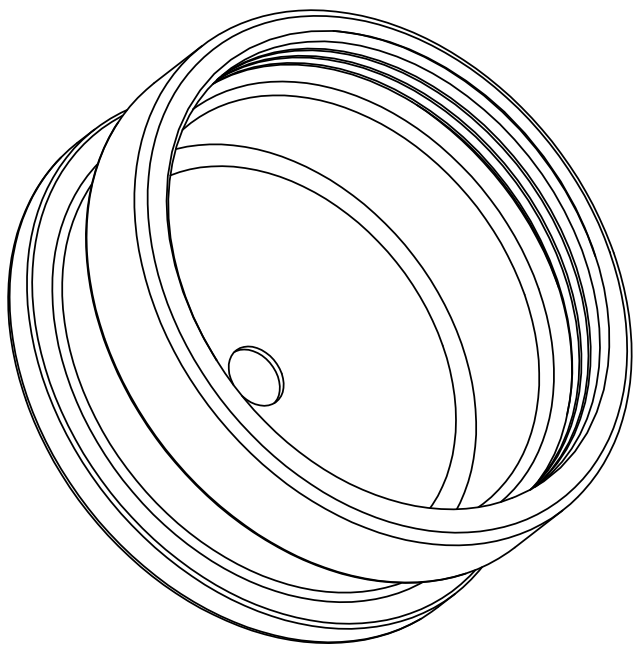
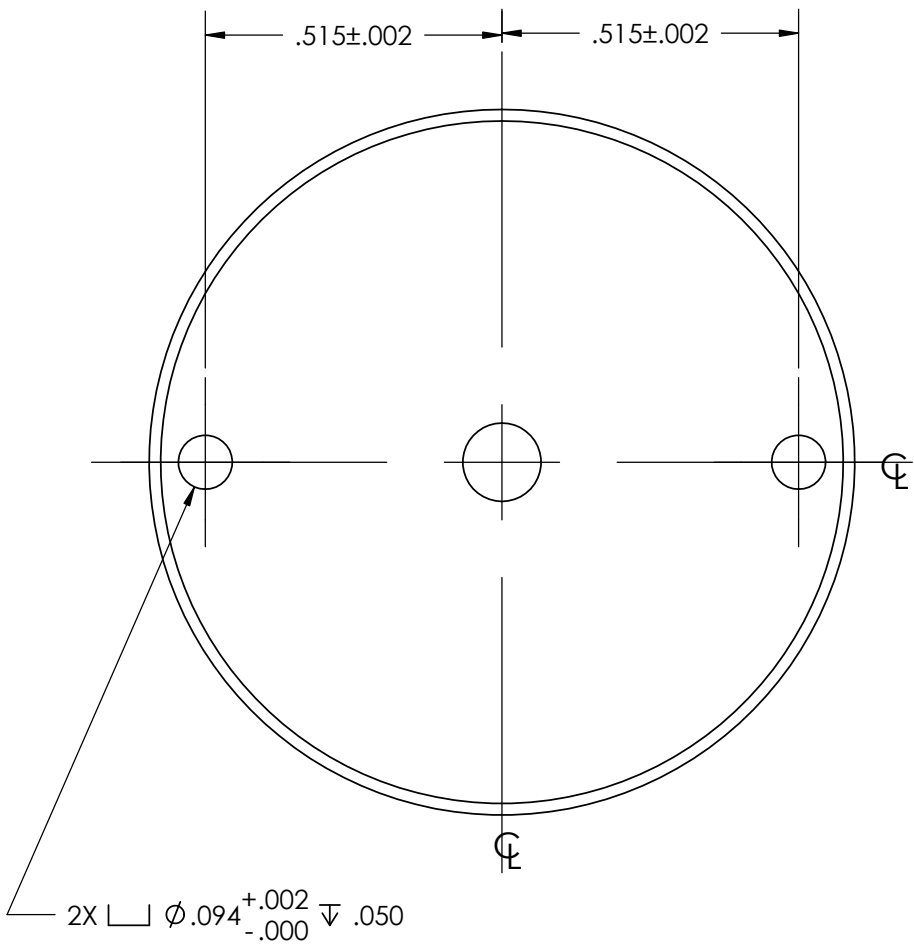
BILL OF MATERIALS				last updated on: Thursday, April 07, 2005 4:59:03 PM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE	
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	ENGINEER	Monterey Bay Aquarium Research Institute
Shop Foreman		4 PLACE DIM ±.0005	ANGLES ±1°	Jason Feldman	
Engineer		1. DIMENSIONS ARE IN INCHES		831-775-1837	7700 Sandholdt Road Moss Landing, CA 95039
NEXT ASSY Description	NEXT ASSY Number	2. DIMENSION LIMITS HELD AFTER PLATING		cell: 831-295-4546	
		3. REMOVE BURRS & SHARP EDGES .010 MAX		CHECKED	ESP filter holder (puck)
		4. MACHINED FILLET RADII .000 TO .003		PROJECT NUMBER	
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		701312.00	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH, MAX .001 INCHES FOR SINGLE SURFACE.		PROJECT	ESP 2G
		7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED		SIZE	C
DO NOT SCALE DRAWING				DWG. NO.	1002433
				REV.	B
				CAD FILE:	X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)
				SHEET 1 OF 11	

1002433-001
SH1 & SH1-HV BOTTOM

SURFACE FINISH TO BE ACHIEVED ON LATHE - NO ABRASIVE POLISHING



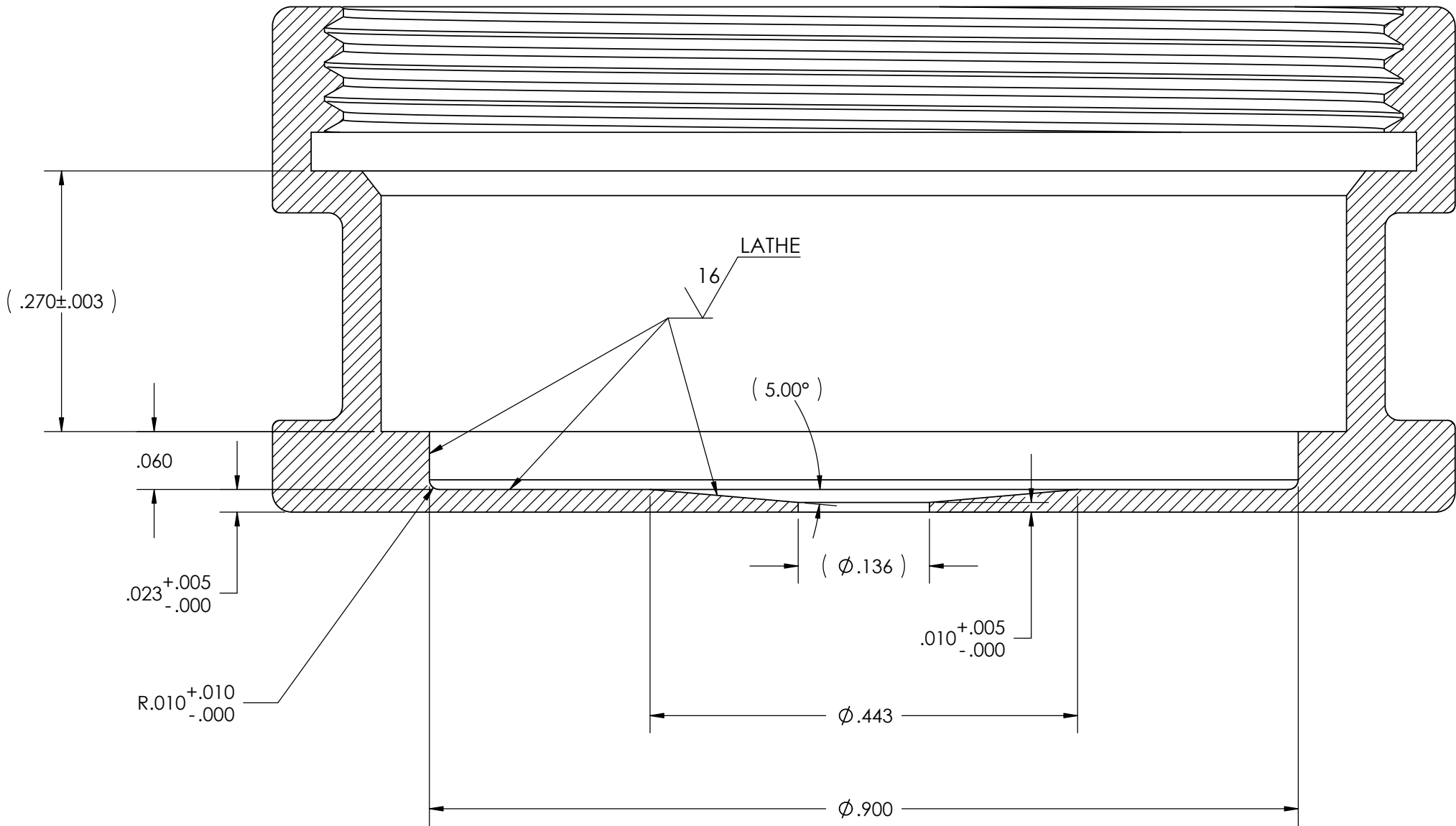
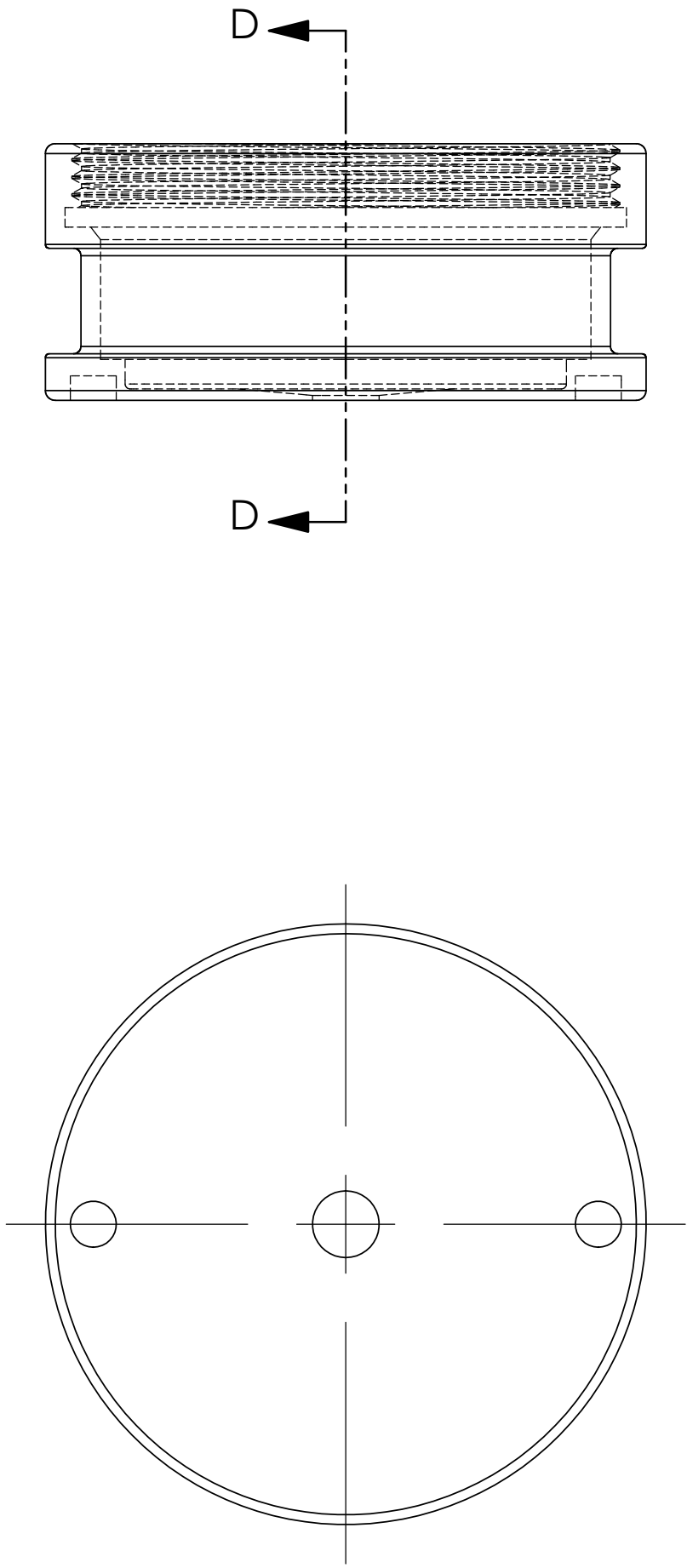
SECTION C-C



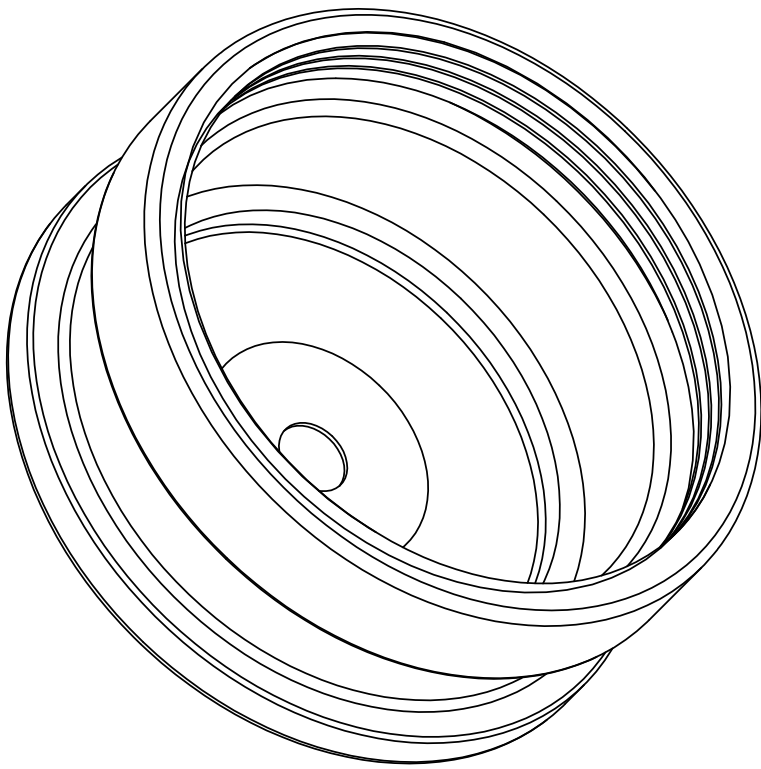
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1	1002433-001	Puck bottom - SH1	Titanium Grade 2	125
BILL OF MATERIALS				
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		
Inspector		2 PLACE DIM $\pm .01$	3 PLACE DIM $\pm .005$	4 PLACE DIM $\pm .0005$
Shop Foreman		1. DIMENSIONS ARE IN INCHES	ANGLES $\pm 1^\circ$	
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING		
		3. REMOVE BURRS & SHARP EDGES .010 MAX		
		4. MACHINED FILLET RADII .000 TO .003		
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		
NEXT ASSY Description	NEXT ASSY Number	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH. MAX .001 INCHES FOR SINGLE SURFACE.		
		7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED		
DO NOT SCALE DRAWING		APPROVALS		
		DATE		
		ENGINEER		
		831-775-1837		
		cell: 831-295-4546		
		CHECKED		
		PROJECT NUMBER		
		701312.00		
		PROJECT		
		ESP 2G		
		CAD FILE: X:\701312 ESP 2G\SolidWorks files\Internal structure (1002209)		
		SHEET 2 OF 11		

1002433-002
WCR BOTTOM

ALL DIMENSIONS AND SPECIFICATIONS NOT SHOWN AS PER 1002433-001 (Sheet 2)



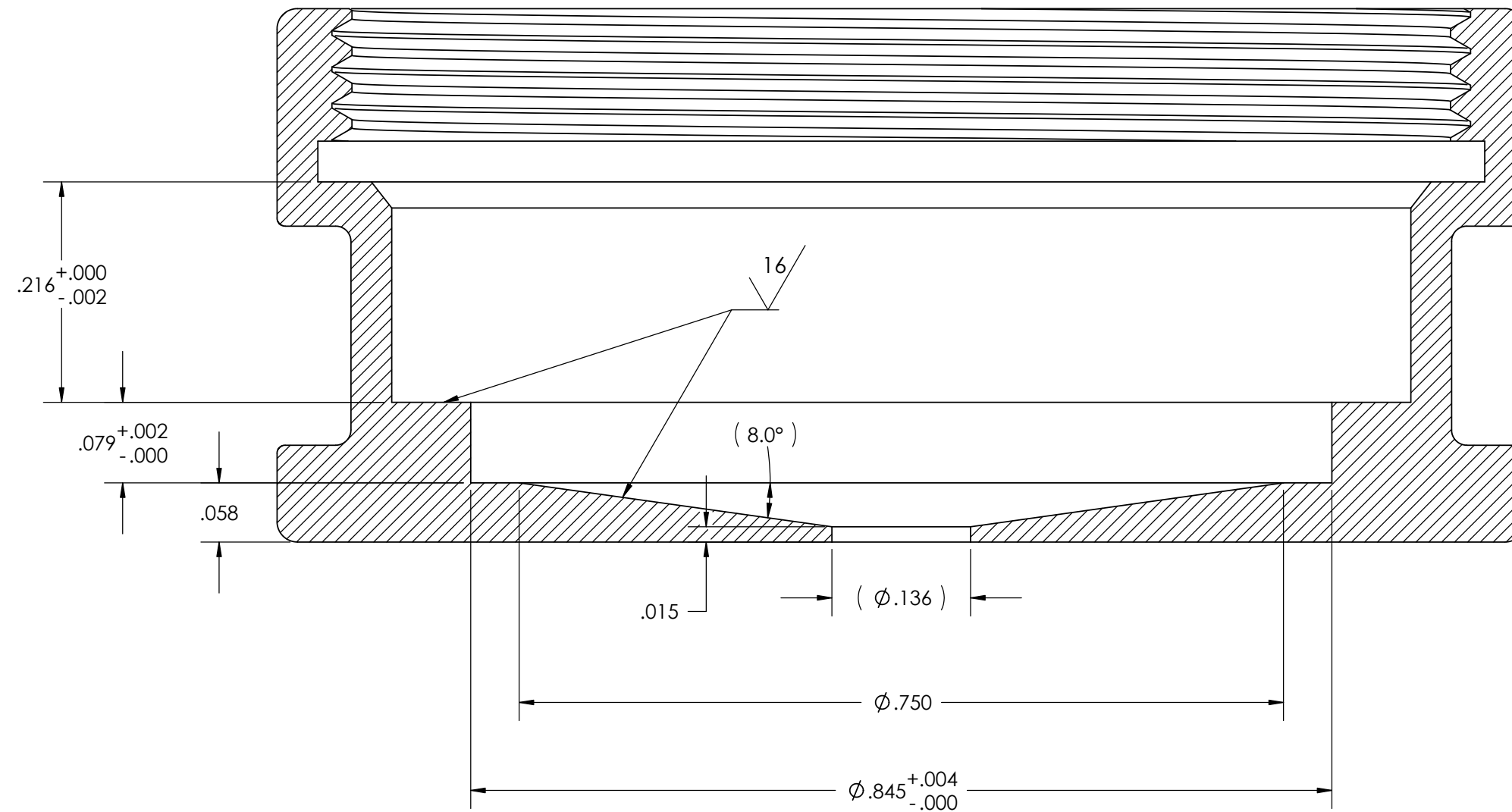
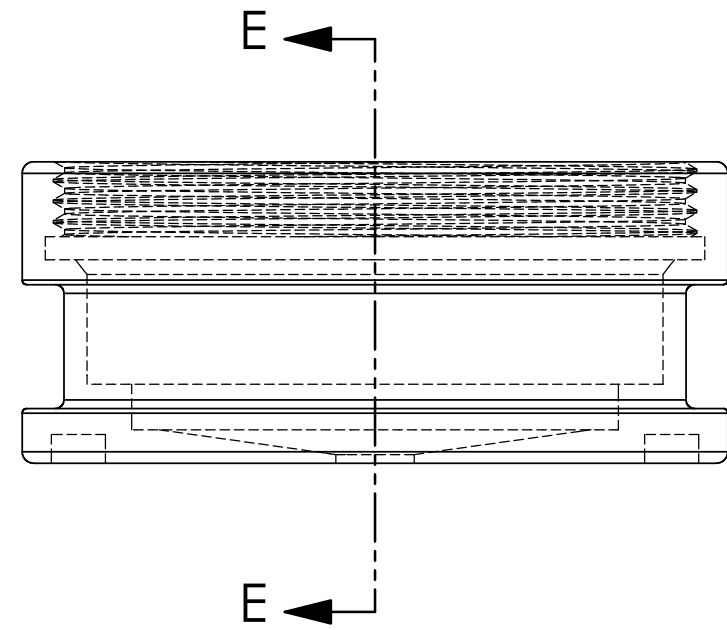
SECTION D-D



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
2	1002433-002	Puck bottom - WCR	Titanium Grade 2	65
BILL OF MATERIALS				
Shop / Q.C.		APPROVALS		
Inspector		ENGINEER		DATE
Shop Foreman		Jason Feldman		
Engineer		831-775-1837		
NEXT ASSY Description		PROJECT NUMBER		701312.00
NEXT ASSY Number		PROJECT		ESP 2G
DO NOT SCALE DRAWING		CAD FILE:		X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)
		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		
		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005
		ANGLES ±1°		
		1. DIMENSIONS ARE IN INCHES		
		2. DIMENSION LIMITS HELD AFTER PLATING		
		3. REMOVE BURRS & SHARP EDGES .010 MAX		
		4. MACHINED FILLET RADII .000 TO .003		
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH. MAX .001 INCHES FOR SINGLE SURFACE.		
		7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED		
		last updated on: Thursday, April 07, 2005 4:59:03 PM		
		Monterey Bay Aquarium Research Institute		
		7700 Sandholdt Road		
		Moss Landing, CA		
		95039		
		ESP filter holder (puck)		
		SIZE	C	DWG. NO.
				1002433
		REV.	B	
		SHEET 3 OF 11		

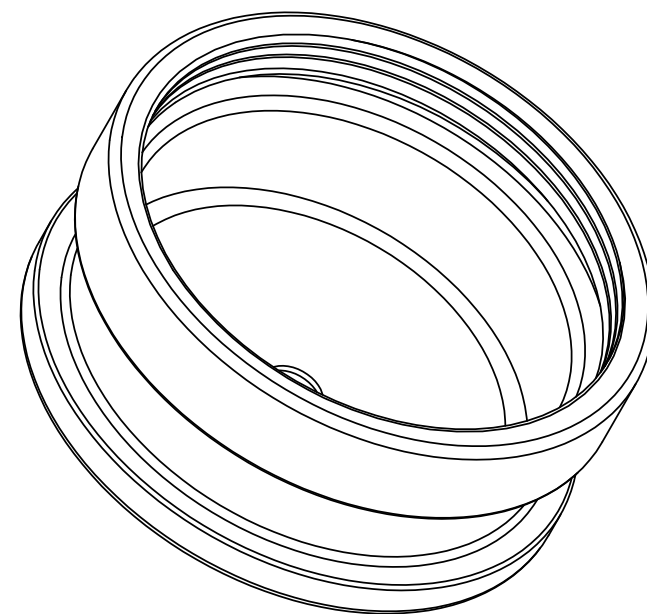
1002433-003
SH2 BOTTOM

ALL DIMENSIONS AND SPECIFICATIONS NOT SHOWN AS PER 1002433-001 (Sheet 2)



SECTION E-E

Magnaplate HCR - all dimensions & tolerances to be held after plating
CLASS 3B Thread tolerance to be held after plating as per specification

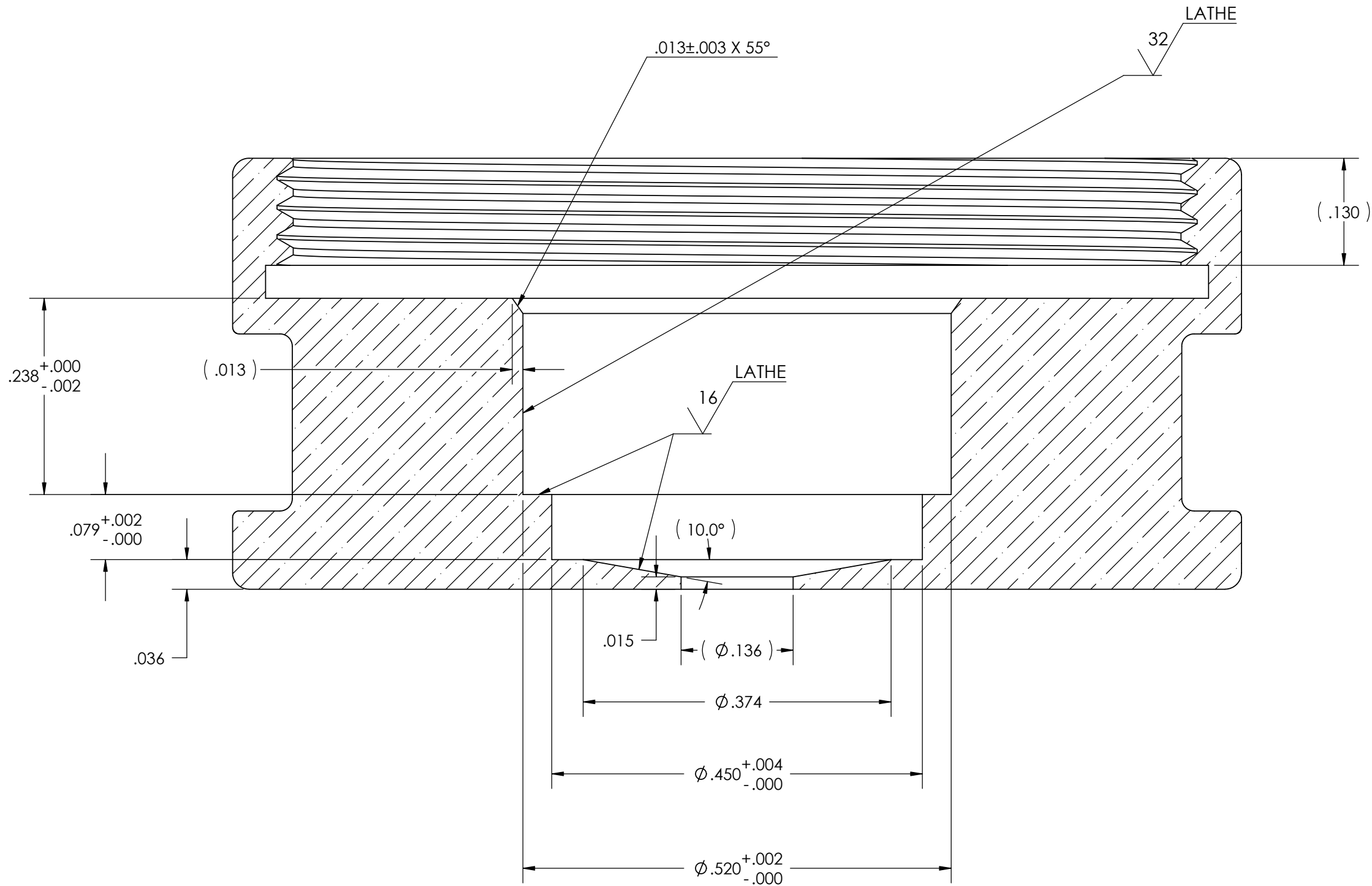
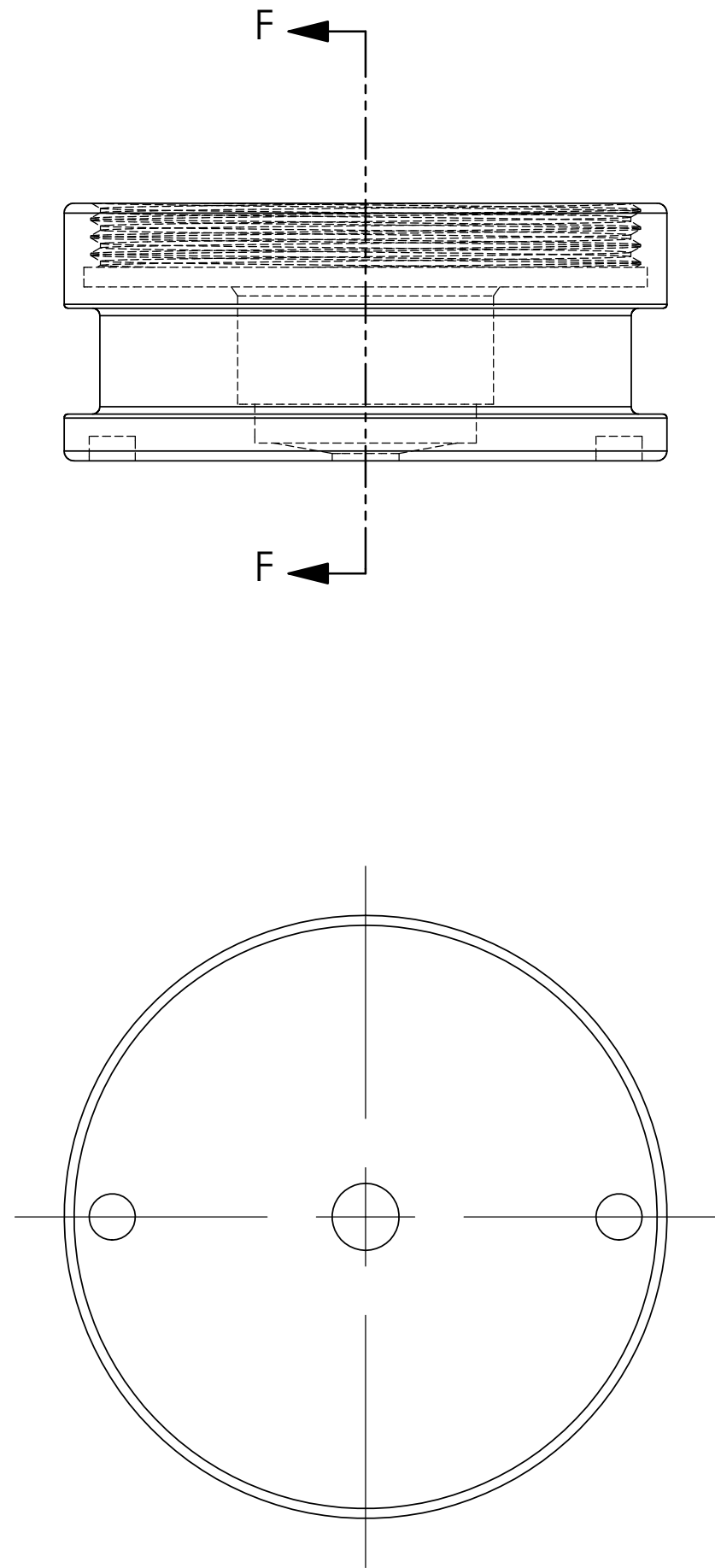


ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
3	1002433-003	SH2 Bottom	6061-T6 Aluminum	40
BILL OF MATERIALS			last updated on: Thursday, April 07, 2005 4:59:03 PM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	APPROVALS	DATE
Inspector			ENGINEER Jason Feldman 831-775-1837 cell: 831-295-4546 CHECKED	
Shop Foreman		2 PLACE DIM ±.01 3 PLACE DIM ±.005 4 PLACE DIM ±.0003 ANGLES ±1°	Monterey Bay Aquarium Research Institute	
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 .003 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005	7700 Sandholdt Road Moss Landing, CA 95039	
NEXT ASSY Description	NEXT ASSY Number	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH MAX .001 INCHES SINGLE SURFACE. 7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED	PROJECT NUMBER 701312.00	ESP filter holder (puck)
DO NOT SCALE DRAWING			PROJECT ESP 2G	SIZE C
			DWG. NO. 1002433	REV. B
		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209) SHEET 4 OF 11		

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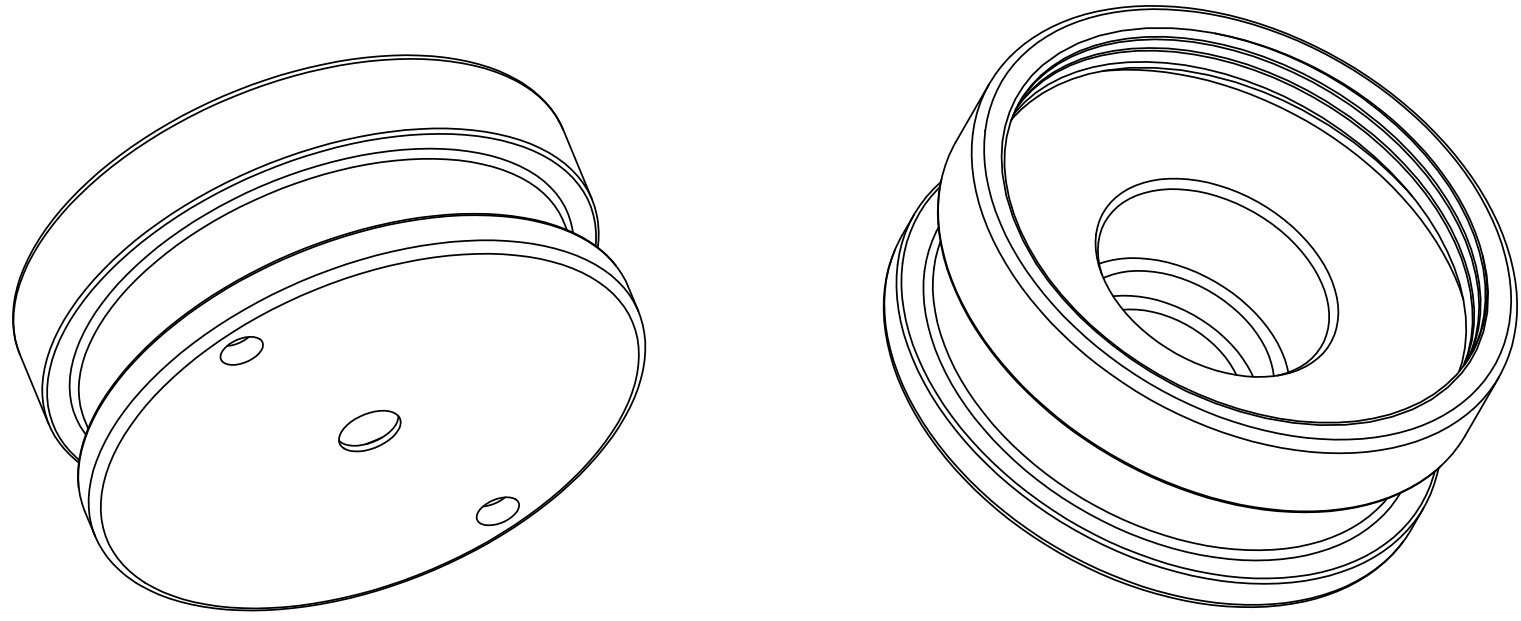
1002433-004
TOX - Array BOTTOM

ALL DIMENSIONS AND SPECIFICATIONS NOT SHOWN AS PER 1002433-001 (Sheet 2)



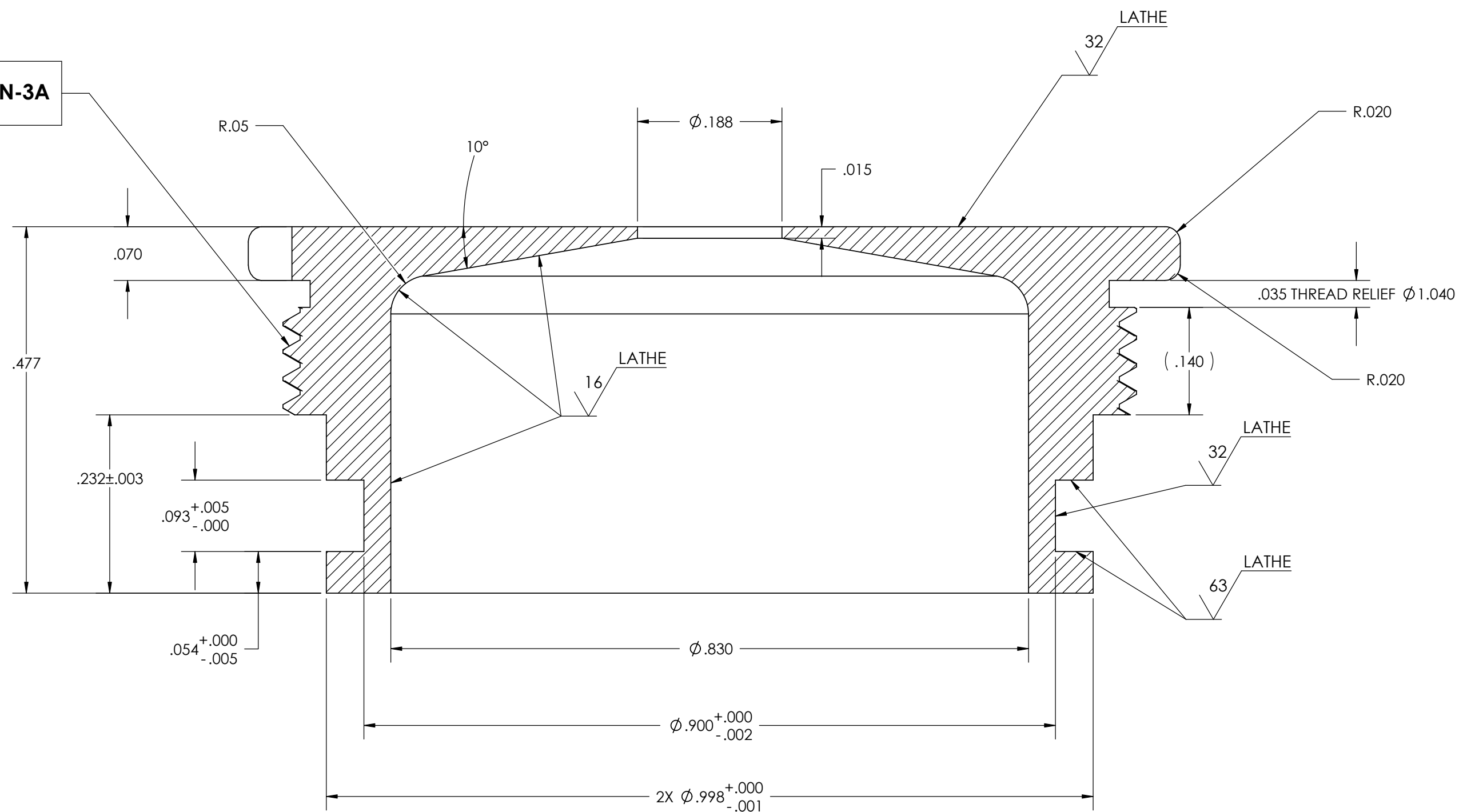
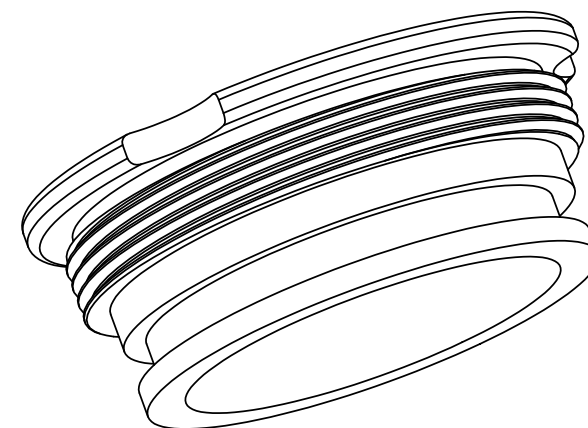
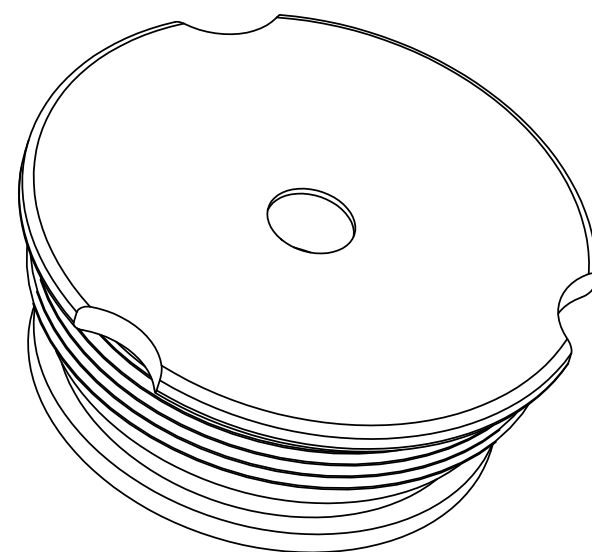
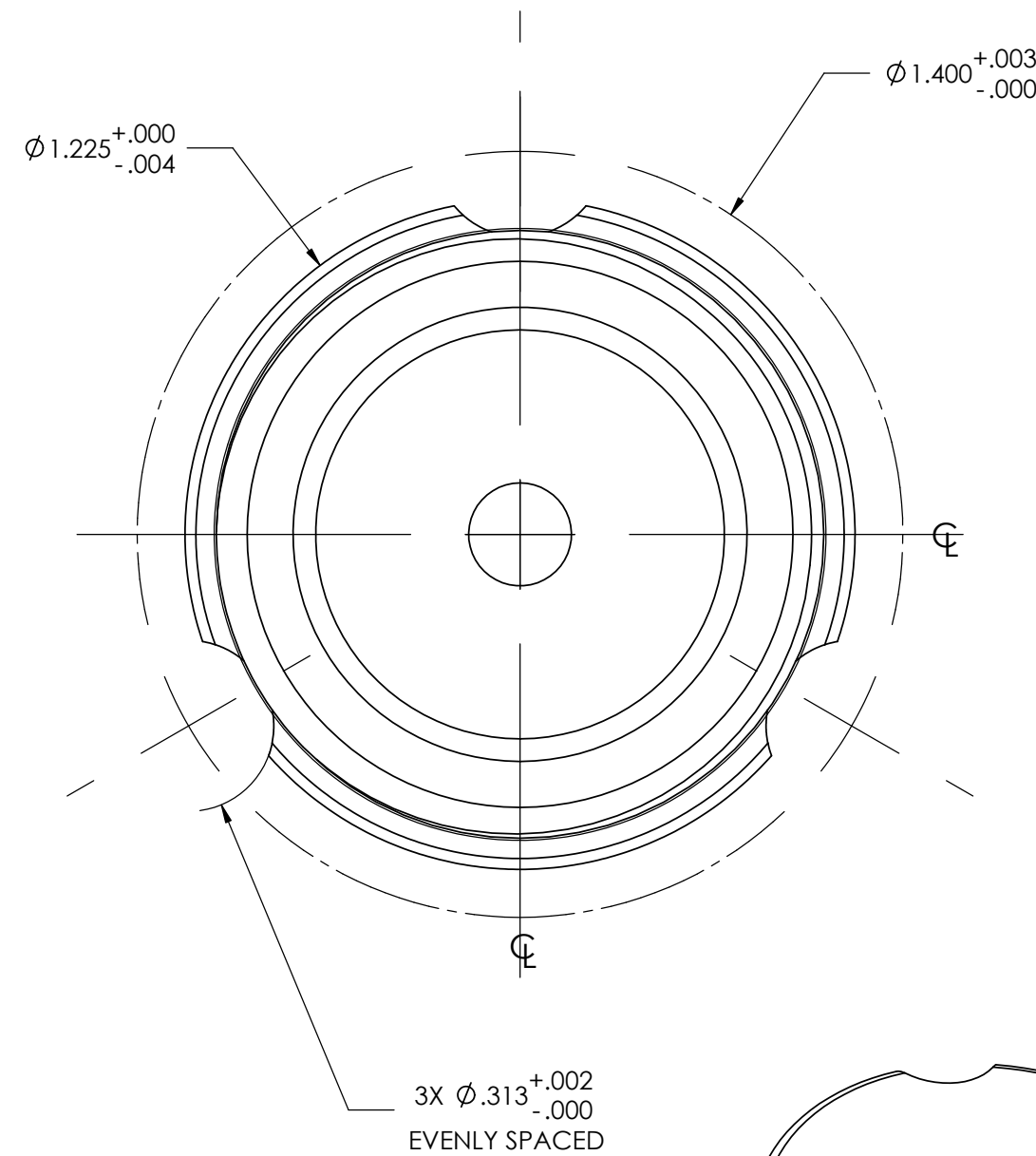
SECTION F-F

Magnaplate HCR - all dimensions & tolerances to be held after plating
CLASS 3B Thread tolerance to be held after plating as per specification



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
4	1002433-004	TOXARRAY BOTTOM	6061-T6 Aluminum	25
BILL OF MATERIALS				
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005
Shop Foreman		1. DIMENSIONS ARE IN INCHES	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH. MAX .001 INCHES FOR SINGLE SURFACE.
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING	3. REMOVE BURRS & SHARP EDGES .010 MAX	4. MACHINED FILLET RADII .000 TO .003
NEXT ASSY Description	NEXT ASSY Number	PROJECT NUMBER 701312.00		DATE
		PROJECT ESP 2G		DATE
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)		
		APPROVALS		
		ENGINEER Jason Feldman 831-775-1837 cell: 831-295-4546		
		CHECKED		
		PROJECT NUMBER 701312.00		
		PROJECT ESP 2G		
		DWG. NO. 1002433		
		REV. B		
		SHEET 5 OF 11		

A schematic cross-section of a cable-stayed bridge. A central vertical pylon supports a horizontal deck via multiple stay cables. A dashed vertical line with arrows labeled 'E' at both ends indicates the direction of the external load.



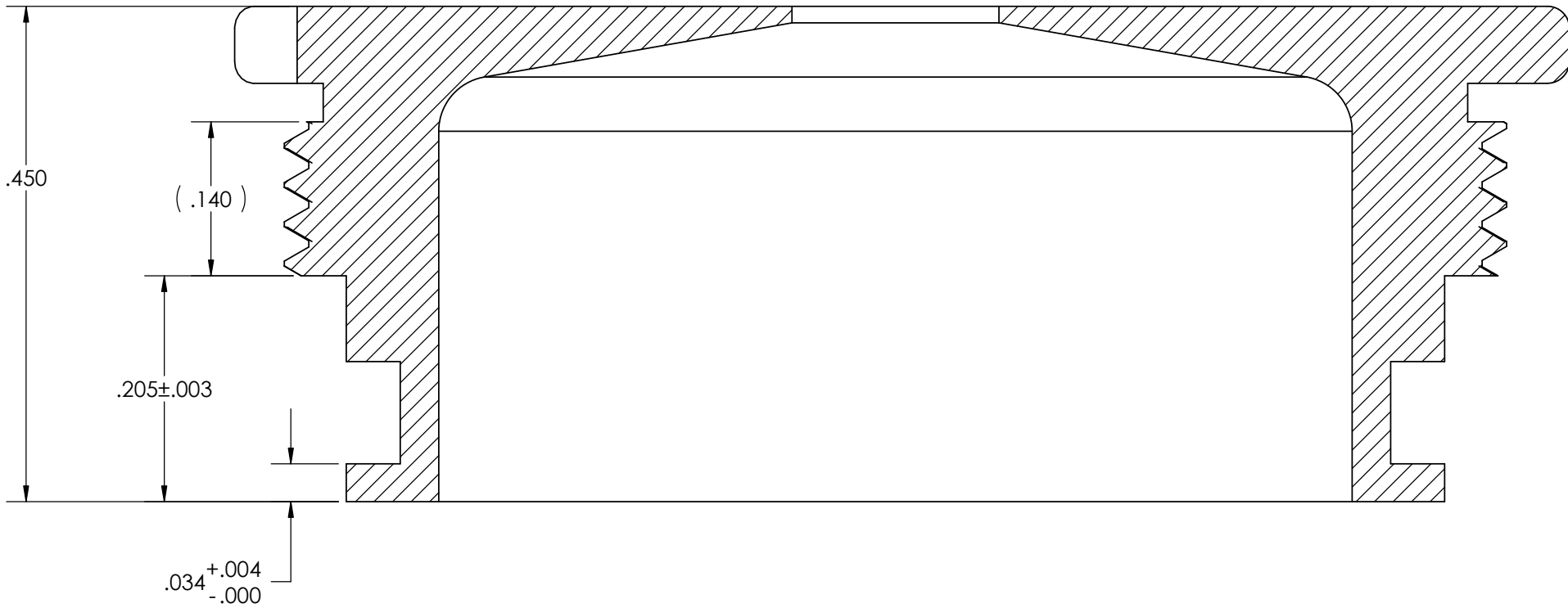
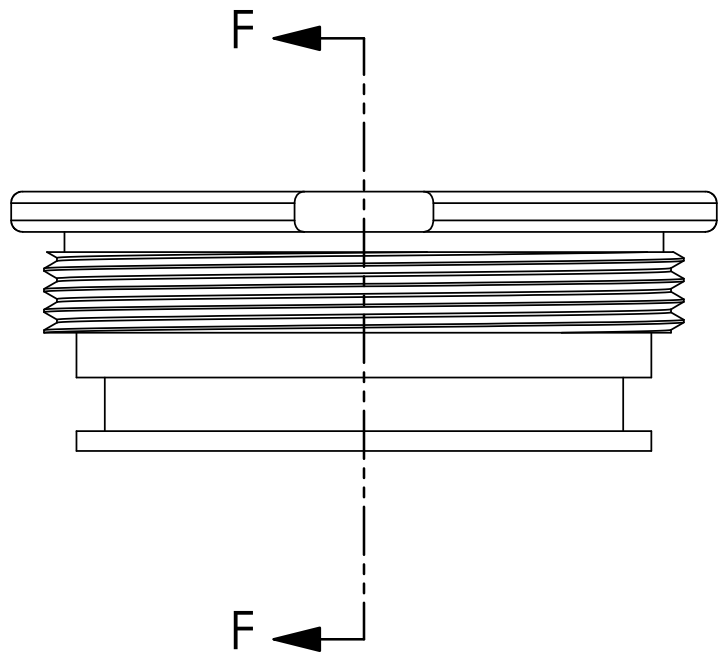
SECTION E-E

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
5	1002433-005	Puck top - SH1 & TOXR	Titanium Grade 2	100
BILL OF MATERIALS			last updated on: Thursday, April 07, 2005 4:59:03 PM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	APPROVALS DATE	
Inspector	2 PLACE DIM ±.01	3 PLACE DIM ±.003	4 PLACE DIM ±.0005	5 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 .003 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005			
Engineer	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .005 PER INCH, MAX .001 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED			
NEXT ASSY Description	NEXT ASSY Number	PROJECT NUMBER 701312.00		ESP filter holder (puck)
DO NOT SCALE DRAWING		PROJECT ESP 2G	SIZE C	DWG. NO. 1002433
CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)			REV. B	SHEET 6 OF 11

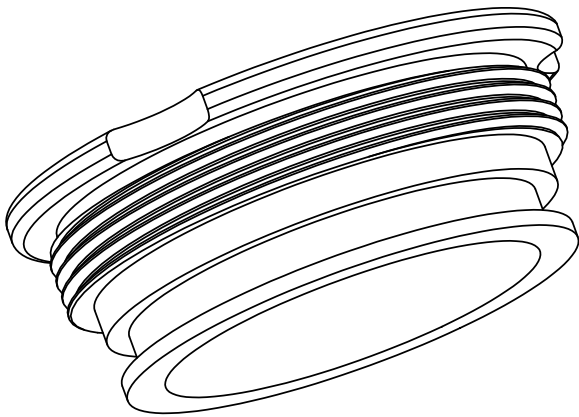
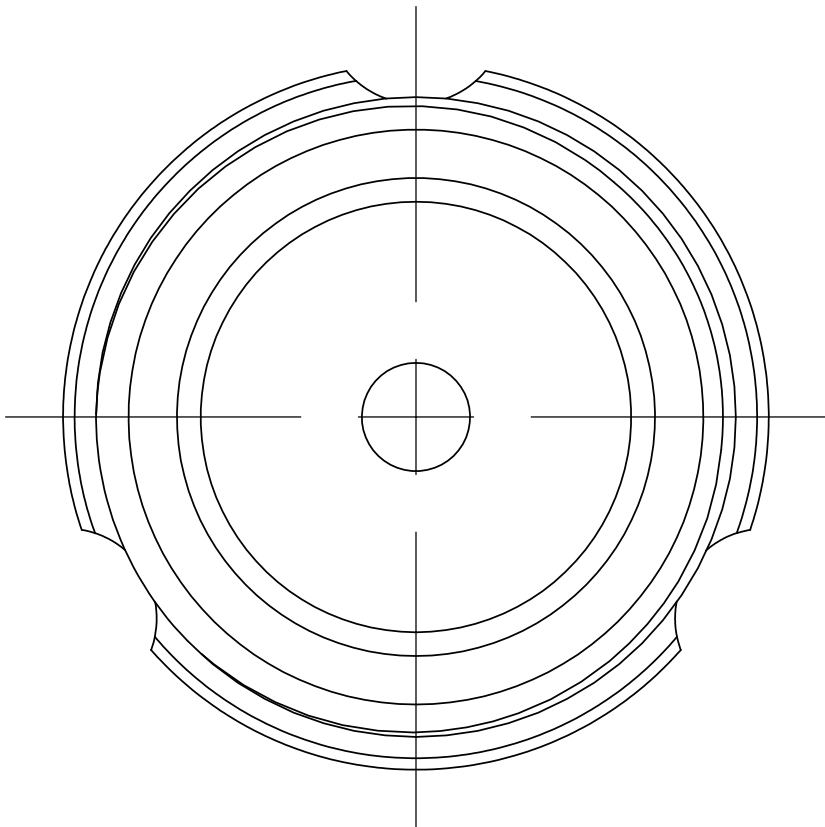
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1002433-006
SH1 - High Volume TOP

ALL DIMENSIONS AND SPECIFICATIONS NOT SHOWN AS PER 1002433-005 (Sheet 6)



SECTION F-F

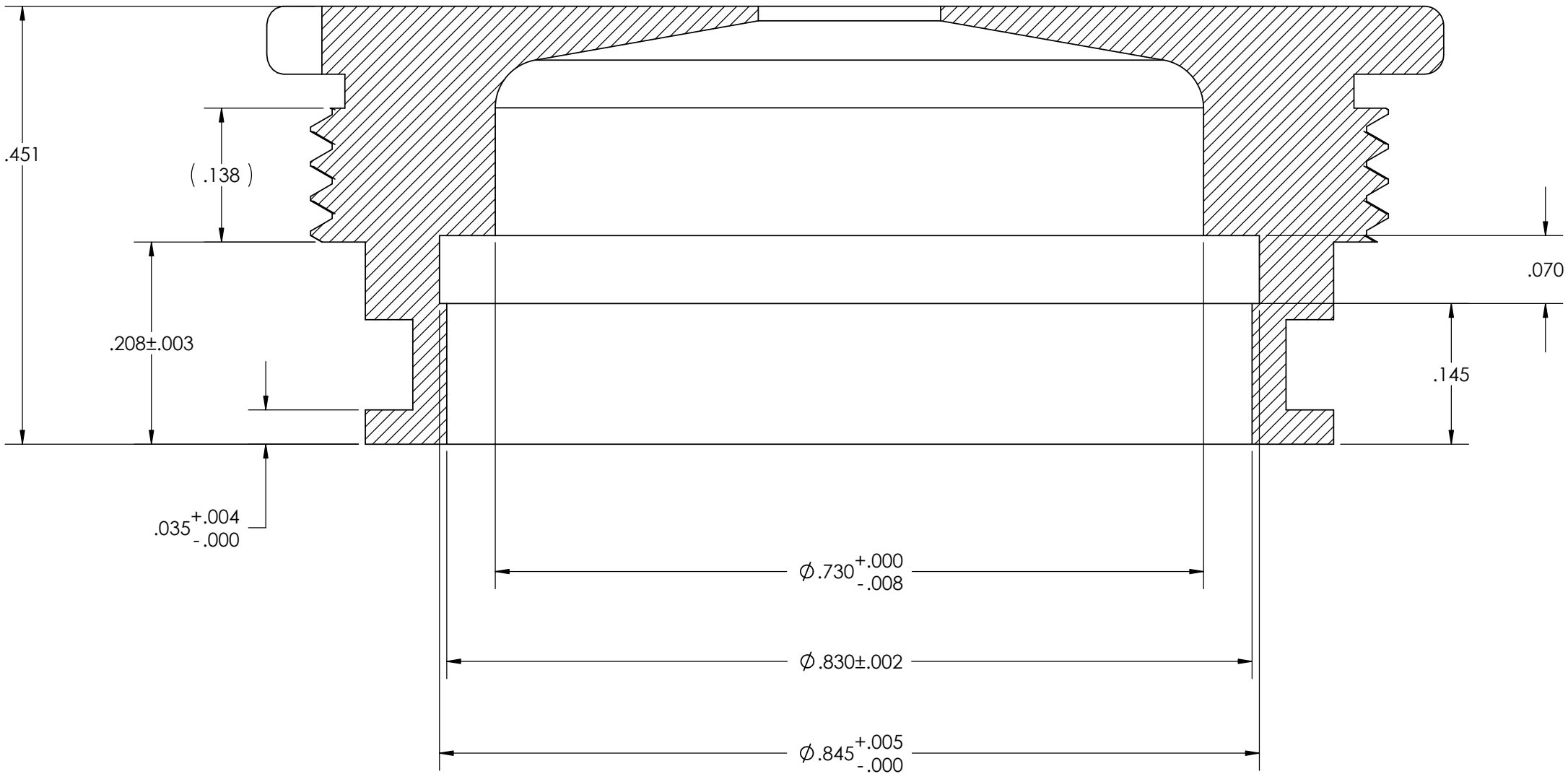
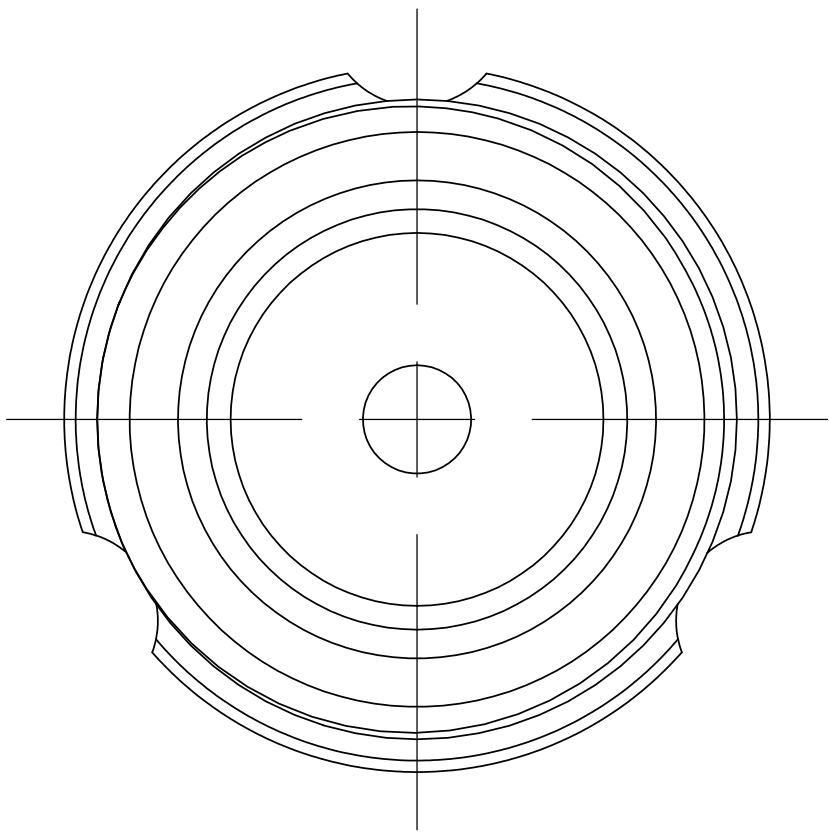
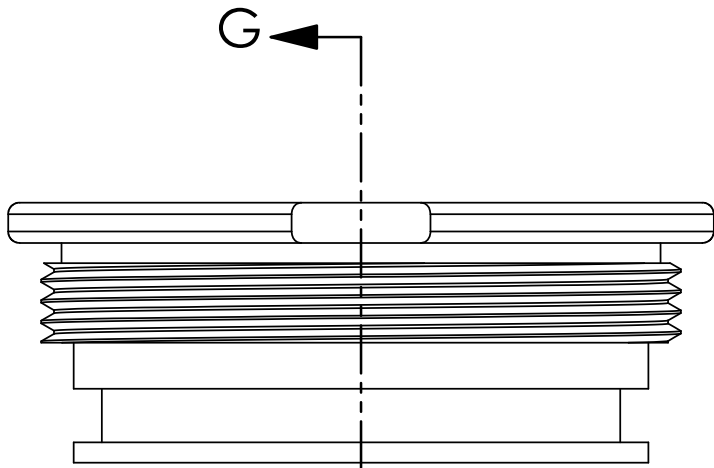


ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
6	1002433-006	Puck top - SH1-HV	Titanium Grade 2	25
BILL OF MATERIALS				
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005
Shop Foreman		1. DIMENSIONS ARE IN INCHES	ANGLES ±1°	
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING		
NEXT ASSY Description	NEXT ASSY Number	3. REMOVE BURRS & SHARP EDGES .010 MAX		
		4. MACHINED FILLET RADII .000 TO .003		
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH. MAX .001 INCHES FOR SINGLE SURFACE.		
		7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED		
DO NOT SCALE DRAWING		APPROVALS		
		ENGINEER	DATE	
		Jason Feldman		
		831-775-1837		
		cell: 831-295-4546		
		CHECKED		
		PROJECT NUMBER		
		701312.00		
		PROJECT		
		ESP 2G		
		SIZE		
		C		
		DWG. NO.		
		1002433		
		REV.		
		B		
		CAD FILE:	X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)	
		SHEET 7 OF 11		

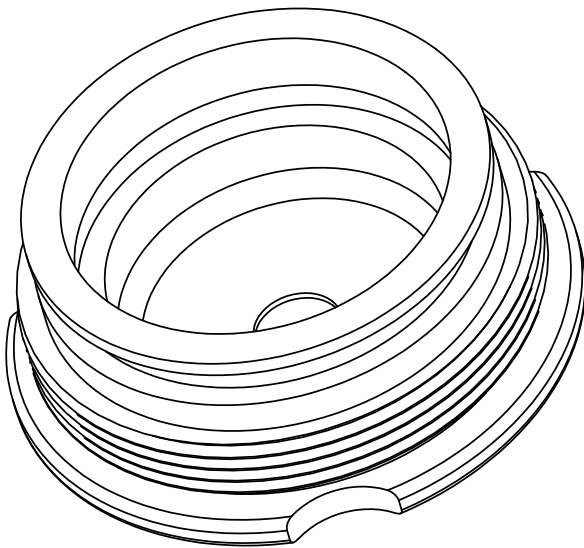
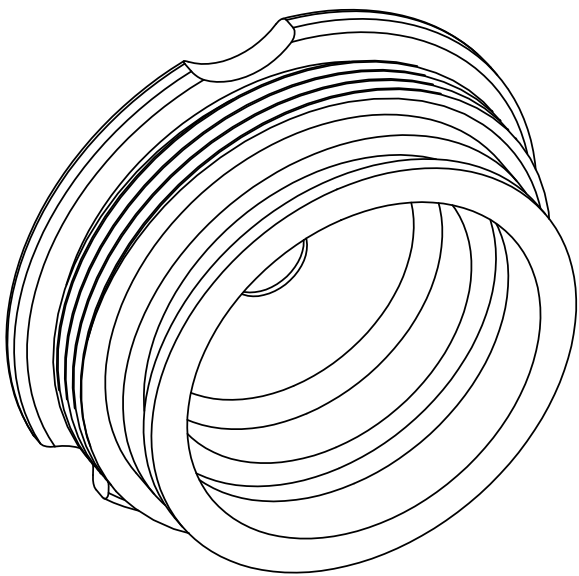
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1002433-007
WCR TOP

ALL DIMENSIONS AND SPECIFICATIONS NOT SHOWN AS PER 1002433-005 (Sheet 6)



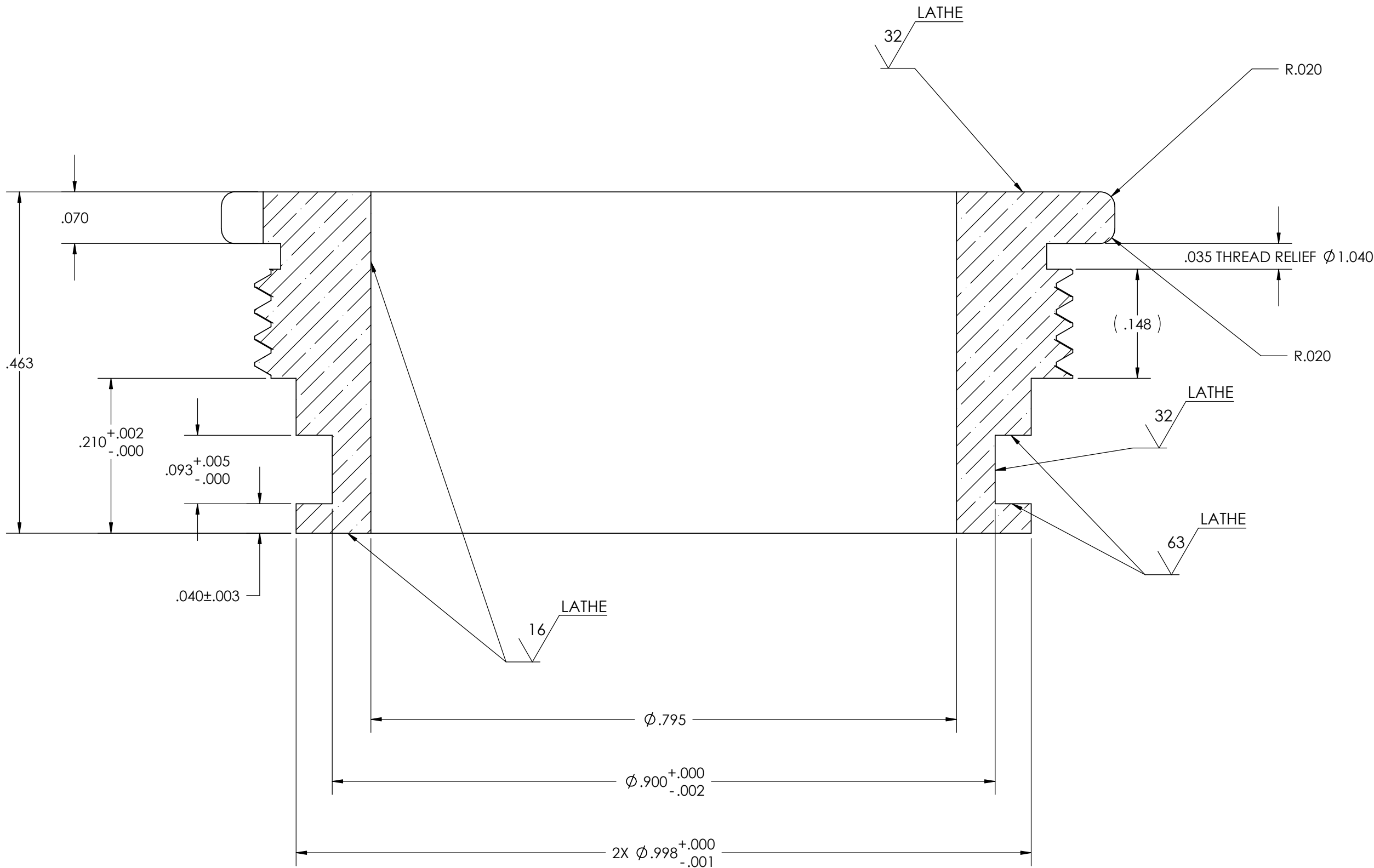
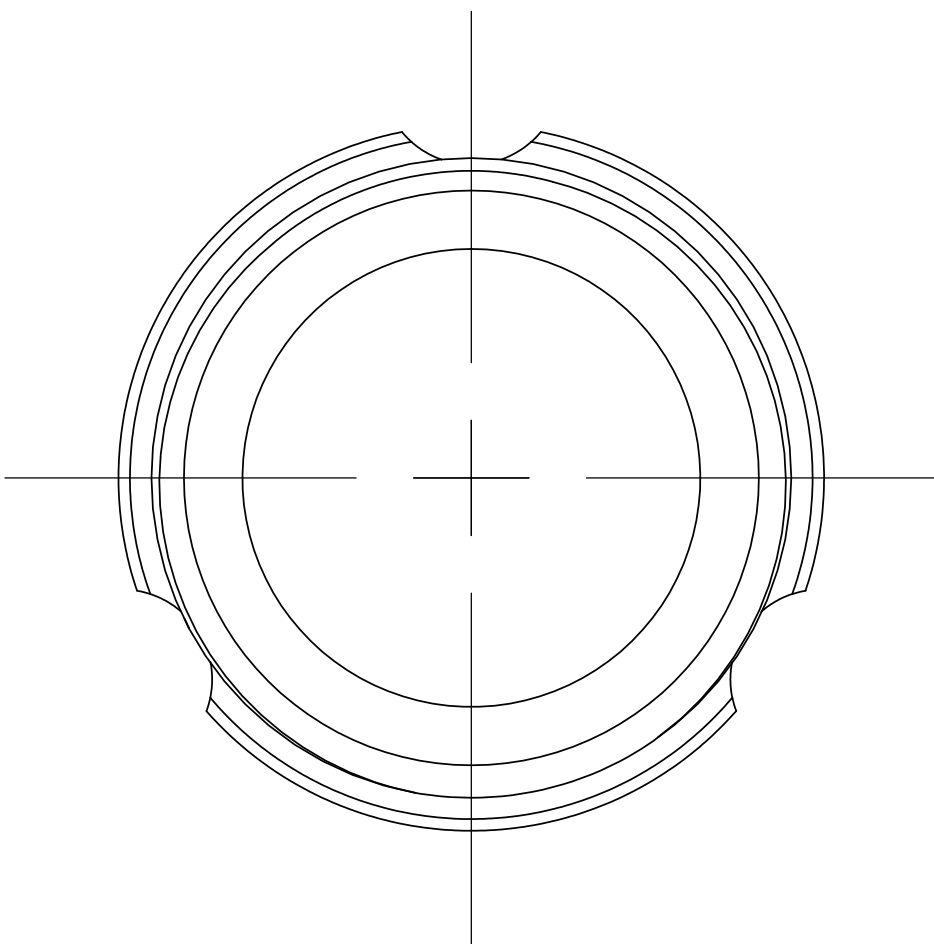
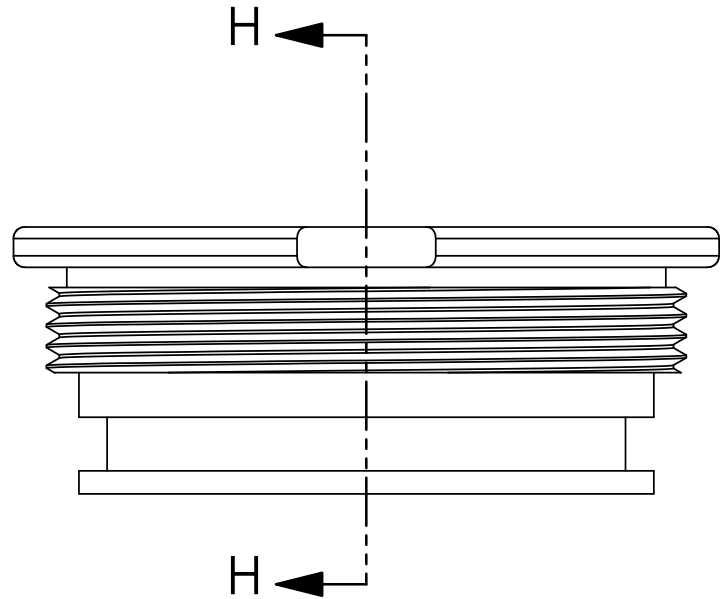
SECTION G-G



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
7	1002433-007	WCR TOP	Titanium Grade 2	65
BILL OF MATERIALS				
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005
Shop Foreman		1. DIMENSIONS ARE IN INCHES	ANGLES ±1°	
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING		
		3. REMOVE BURRS & SHARP EDGES .010 MAX		
		4. MACHINED FILLET RADII .000 TO .003		
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		
NEXT ASSY Description	NEXT ASSY Number	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH. MAX .001 INCHES FOR SINGLE SURFACE.	PROJECT NUMBER 701312.00	PROJECT ESP 2G
		7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED	SIZE C	DWG. NO. 1002433
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)		
		SHEET 8 OF 11		

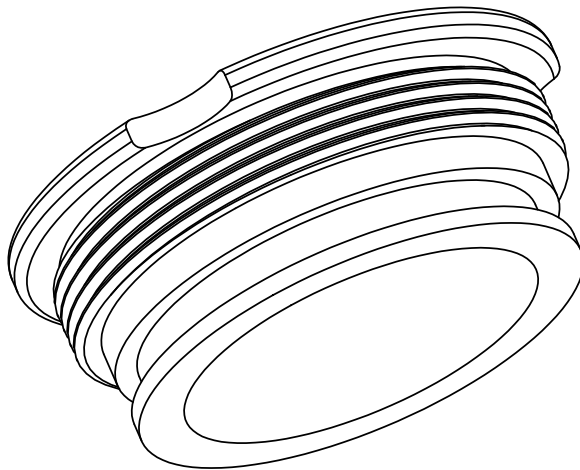
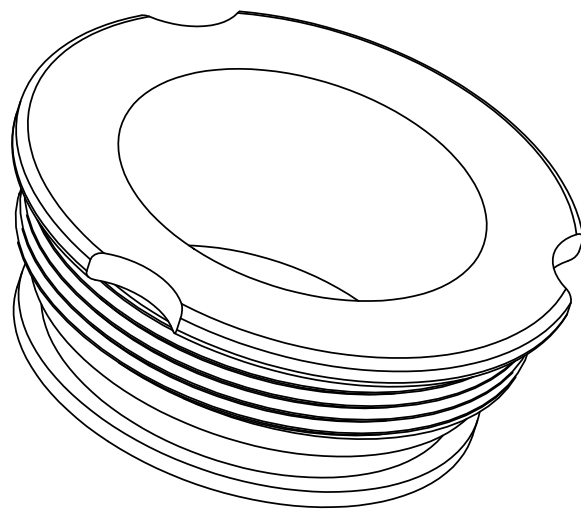
1002433-008
SH2 TOP

ALL DIMENSIONS AND SPECIFICATIONS NOT SHOWN AS PER 1002433-005 (Sheet 6)



SECTION H-H

Magnaplate HCR - all dimensions & tolerances to be held after plating
CLASS 3A Thread tolerance to be held after plating as per specification



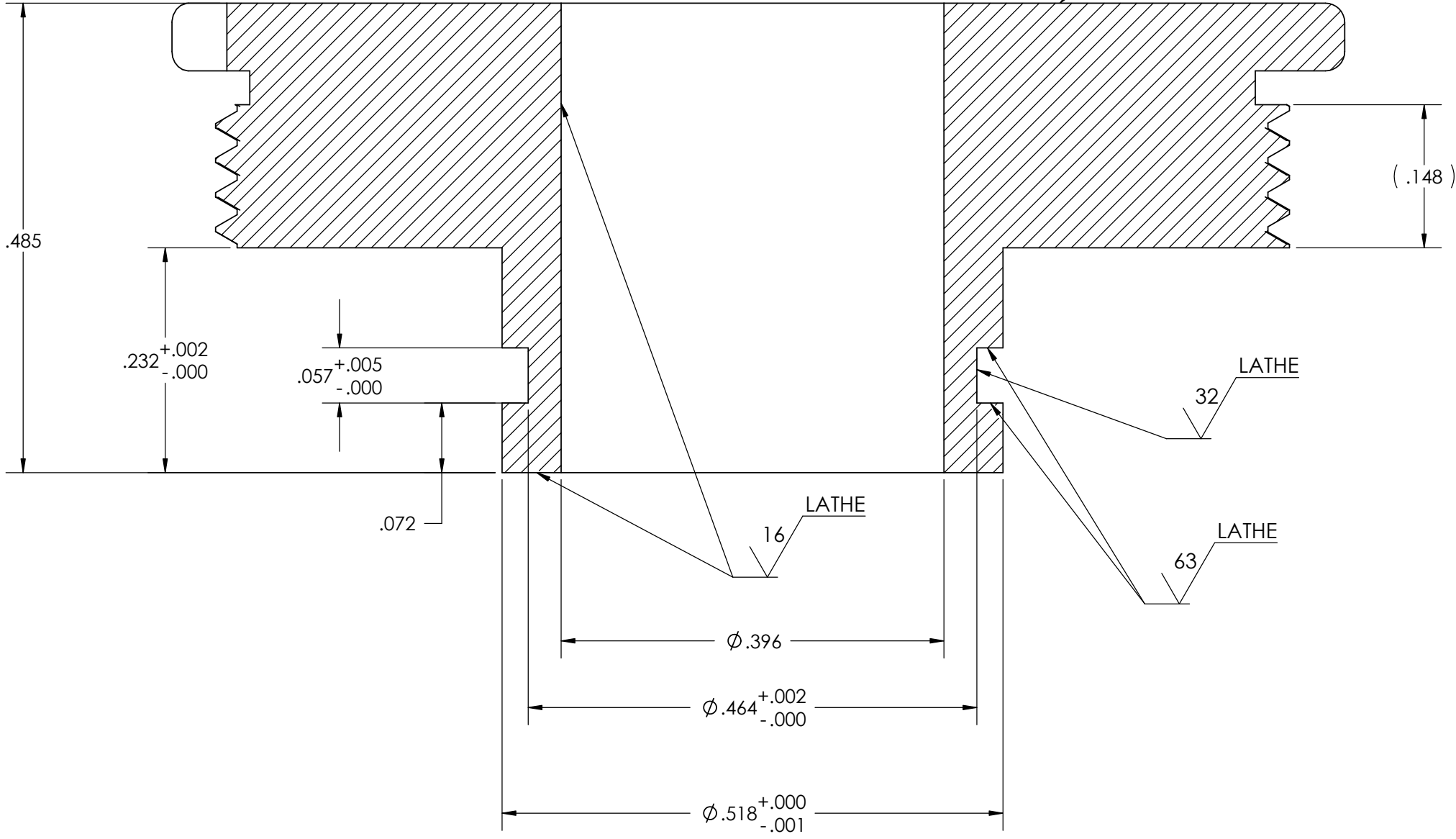
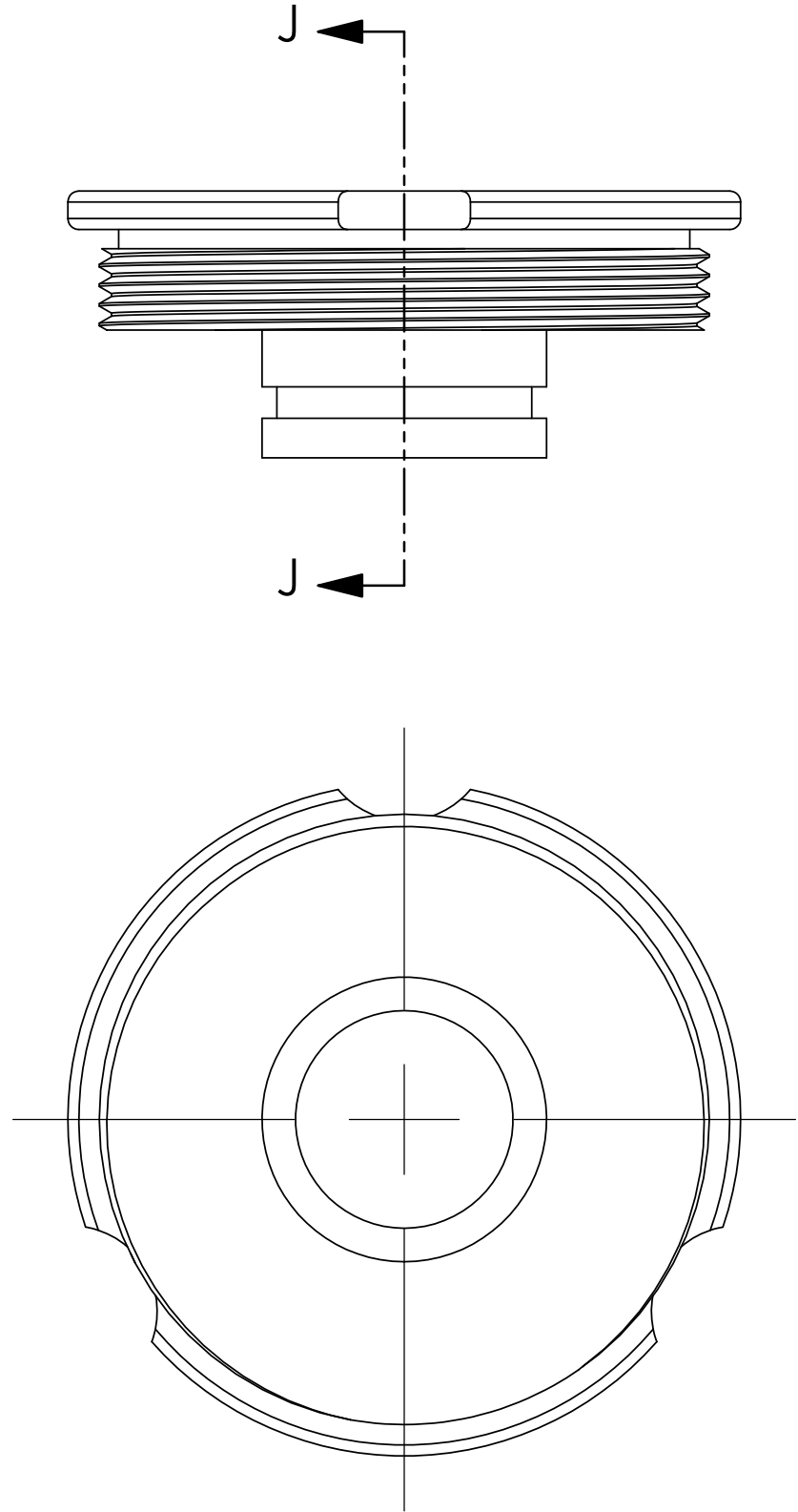
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
8	1002433-008	SH2 Top	6061-T6 Aluminum	40
BILL OF MATERIALS				
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005
Shop Foreman		1. DIMENSIONS ARE IN INCHES	ANGLES ±1°	APPROVALS
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING	3. REMOVE BURRS & SHARP EDGES .010 MAX	ENGINEER
NEXT ASSY Description	NEXT ASSY Number	4. MACHINED FILLET RADII .000 TO .003	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005	DATE
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH. MAX .001 INCHES FOR SINGLE SURFACE.	7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED	Jason Feldman
				831-775-1837
				cell: 831-295-4546
				CHECKED
				PROJECT NUMBER
				701312.00
				PROJECT
				ESP 2G
				SIZE
				C
				DWG. NO.
				1002433
				REV.
				B
				CAD FILE:
				X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)
				SHEET 9 OF 11

1002433-009
TOX - Array TOP

ALL DIMENSIONS AND SPECIFICATIONS NOT SHOWN AS PER 1002433-005 (Sheet 6)

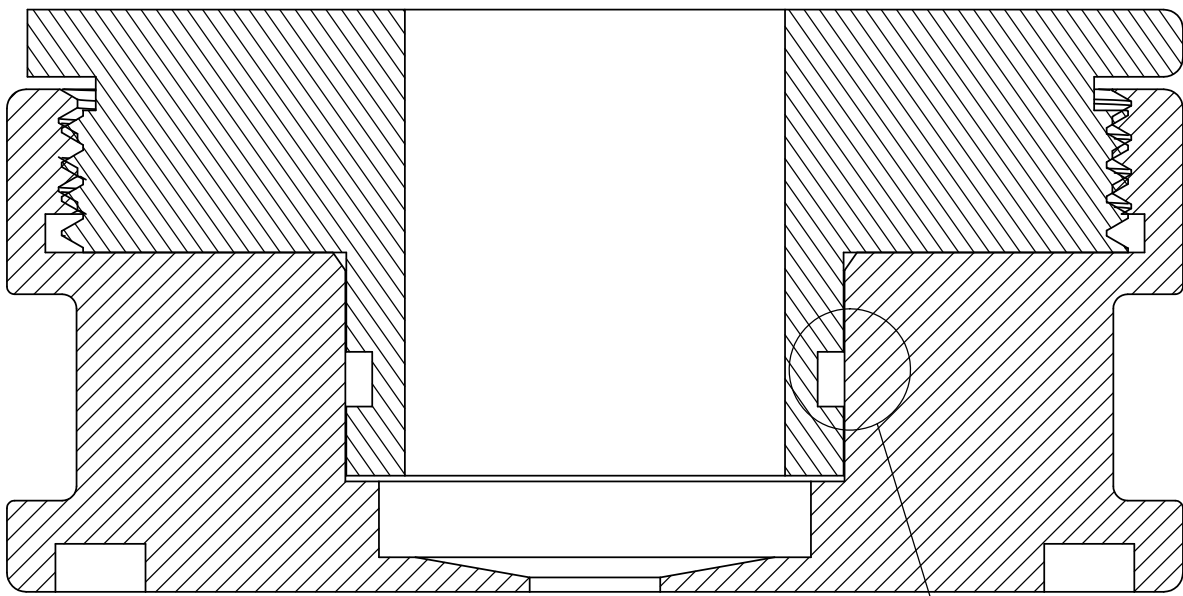
to utilize APPLE O-ring
0.453 I.D. x 0.039 Width
material: Buna-N
durometer: 60 Shore A

O-RING COMPRESSION:
MIN: 26%
MAX: 31%
O-Ring I.D. 2.4% less than groove

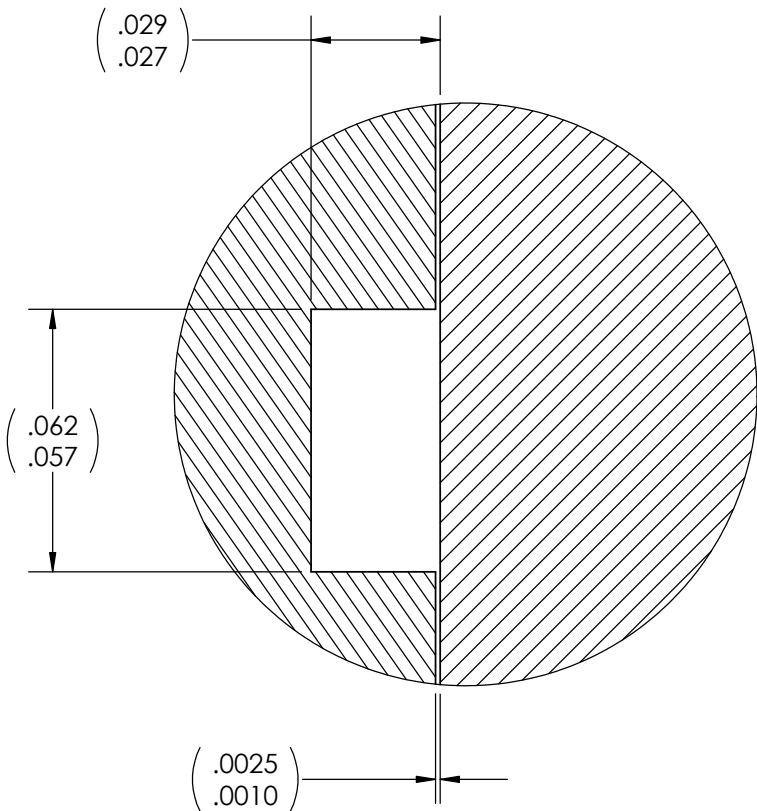


SECTION J-J

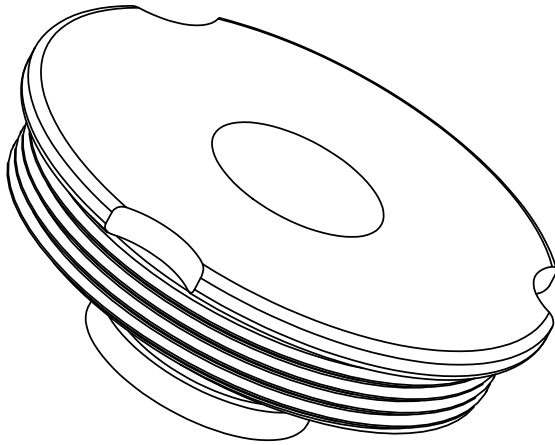
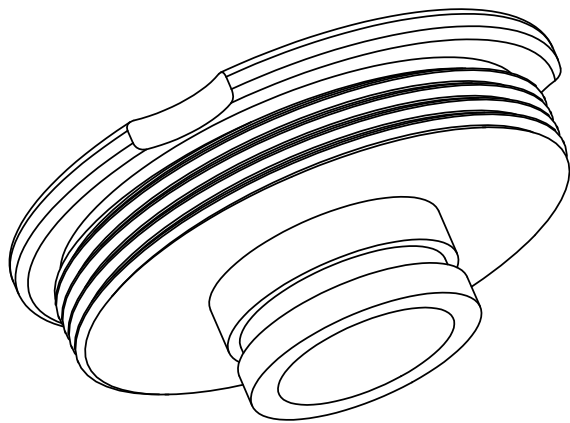
Magnaplate HCR - all dimensions & tolerances to be held after plating
CLASS 3A Thread tolerance to be held after plating as per specification



SECTION (assembly)

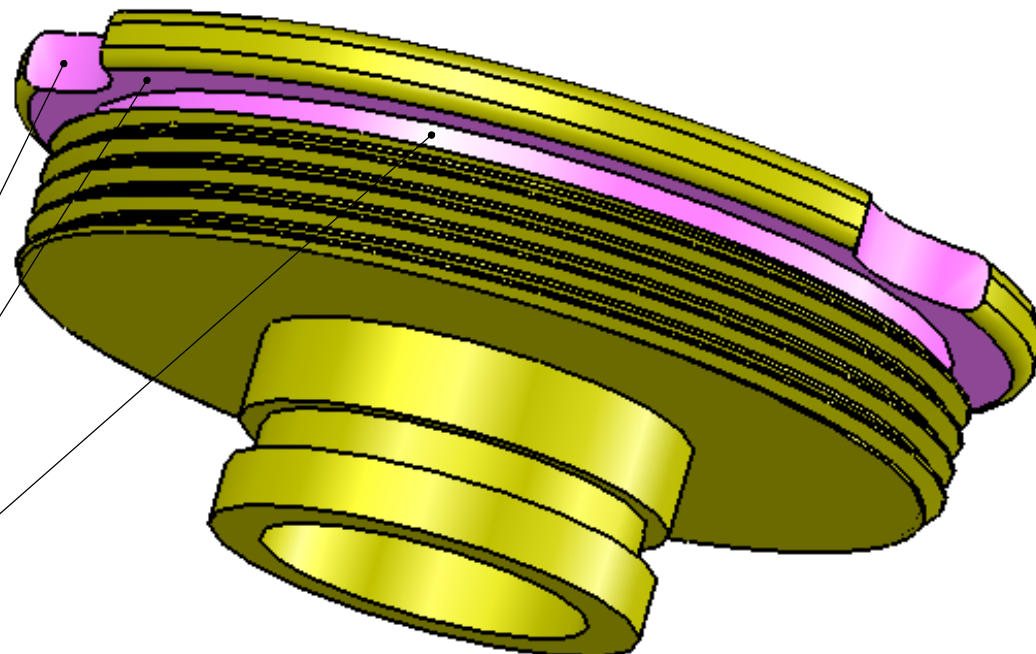
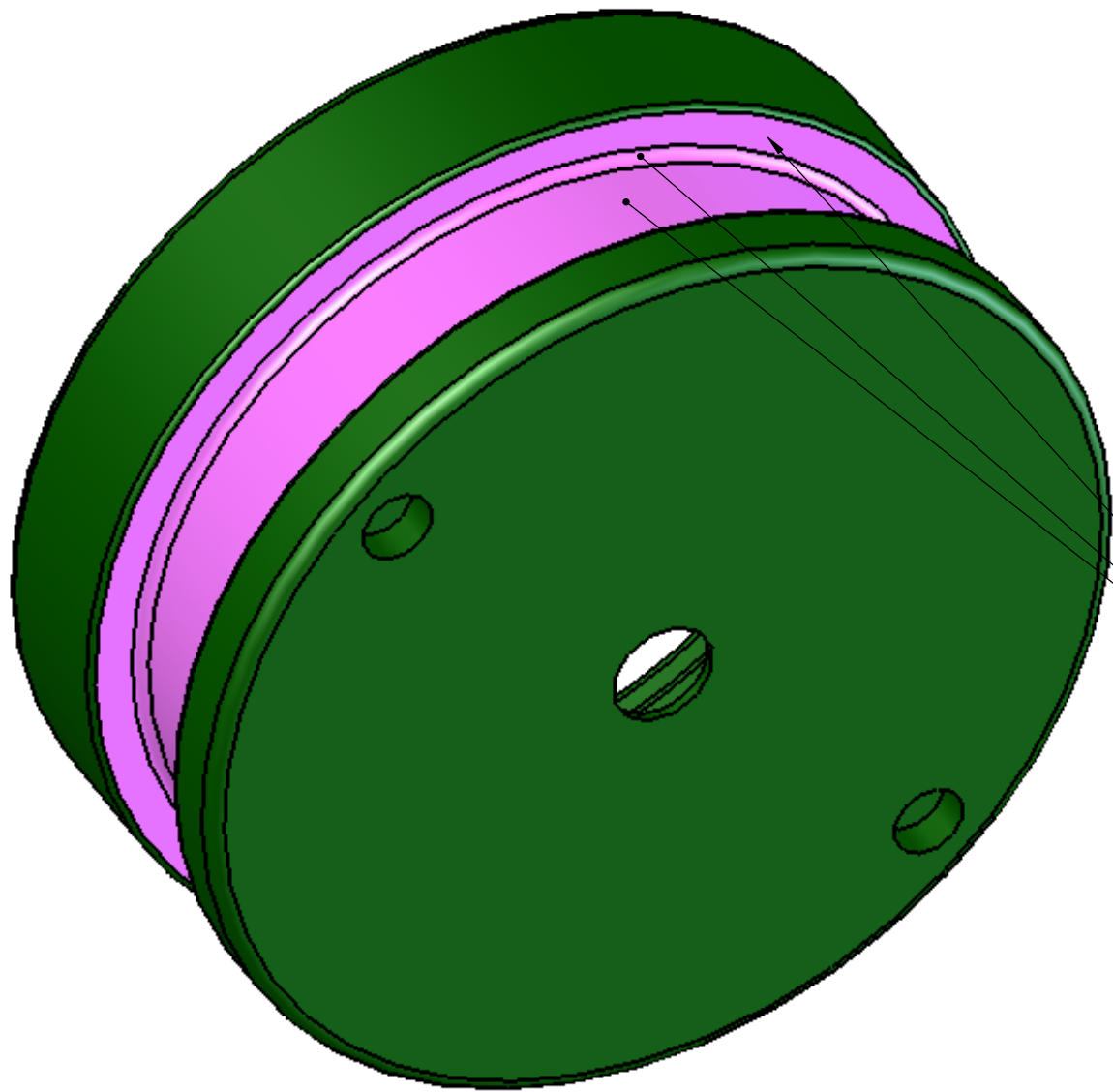


DETAIL L

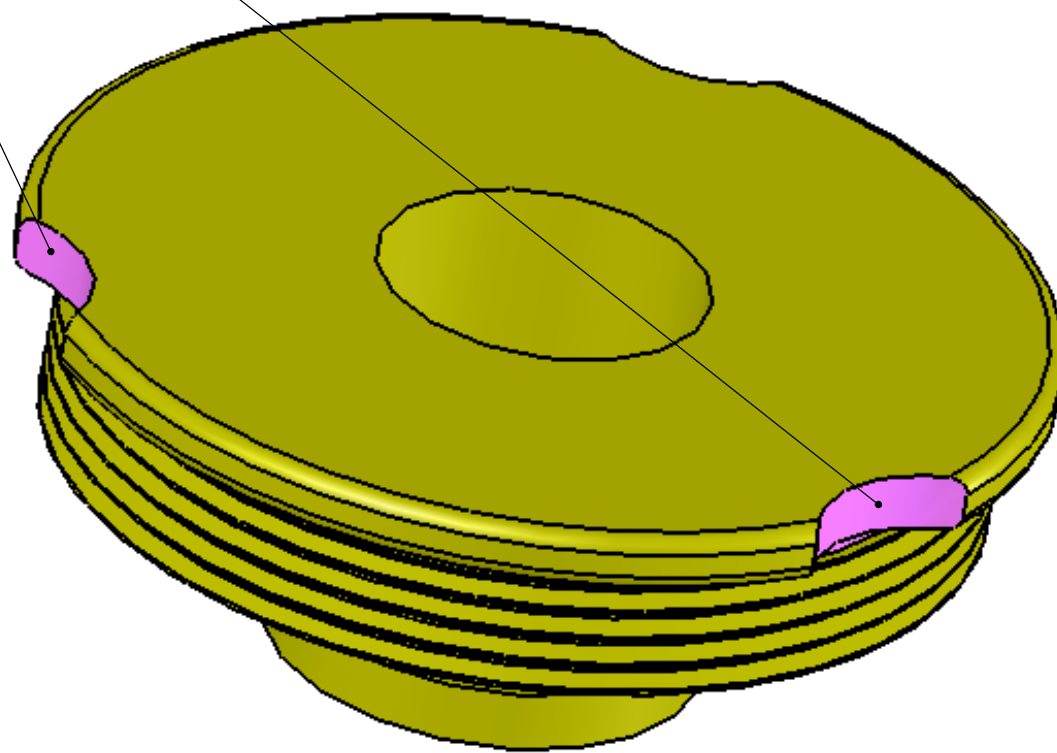
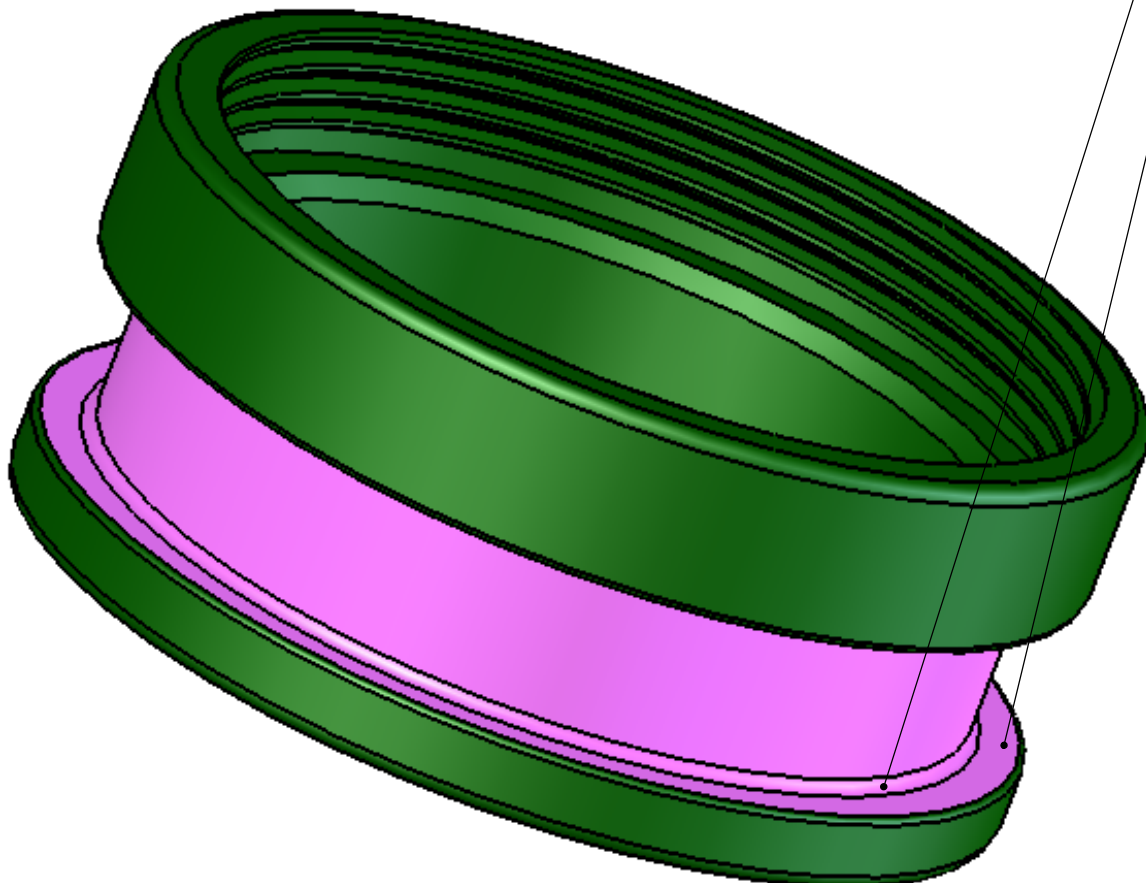


ITEM NO.		PART NUMBER		DESCRIPTION		MATERIAL		QTY.		
9		1002433-009		TOXARRAY TOP		6061-T6 Aluminum		25		
BILL OF MATERIALS								last updated on: Thursday, April 07, 2005 4:59:03 PM		
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:				APPROVALS		DATE		
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	4 PLACE DIM ±.0005	ANGLES ±1°	ENGINEER Jason Feldman 831-775-1837 cell: 831-295-4546 CHECKED		Monterey Bay Aquarium Research Institute		
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 .003 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				7700 Sandholdt Road Moss Landing, CA 95039				
Engineer		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH, MAX .001 INCHES FOR SINGLE SURFACE.				PROJECT NUMBER 701312.00		ESP filter holder (puck)		
NEXT ASSY Description	NEXT ASSY Number	7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED				PROJECT ESP 2G		SIZE C	DWG. NO. 1002433	REV. B
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\Internal structure (1002209)						SHEET 10 OF 11		

FIXTURE NOTES FOR RACKING PARTS FOR MAGNAPLATE HCR PROCESSING



MAGNAPLATE HCR OK BUT NOT
REQUIRED IN PINK AREAS



BILL OF MATERIALS				last updated on: Thursday, April 07, 2005 4:59:03 PM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE	
Inspector		2 PLACE DIM ±.01	3 PLACE DIM ±.005	ENGINEER	Monterey Bay Aquarium Research Institute
Shop Foreman		4 PLACE DIM ±.0005	ANGLES ±1°	Jason Feldman	7700 Sandholdt Road
Engineer		1. DIMENSIONS ARE IN INCHES		831-775-1837	Moss Landing, CA
NEXT ASSY Description		2. DIMENSION LIMITS HELD AFTER PLATING		cell: 831-295-4546	95039
NEXT ASSY Number		3. REMOVE BURRS & SHARP EDGES .010 MAX		CHECKED	
		4. MACHINED FILLET RADII .000 TO .003		PROJECT NUMBER	ESP filter holder (puck)
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		701312.00	SIZE C
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .0005 PER INCH. MAX .001 INCHES FOR SINGLE SURFACE.		PROJECT	DWG. NO. 1002433
		7. SURFACE FINISH TO BE 32 MICRON UNLESS OTHERWISE SPECIFIED		ESP 2G	REV. B
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)		SHEET 11 OF 11	