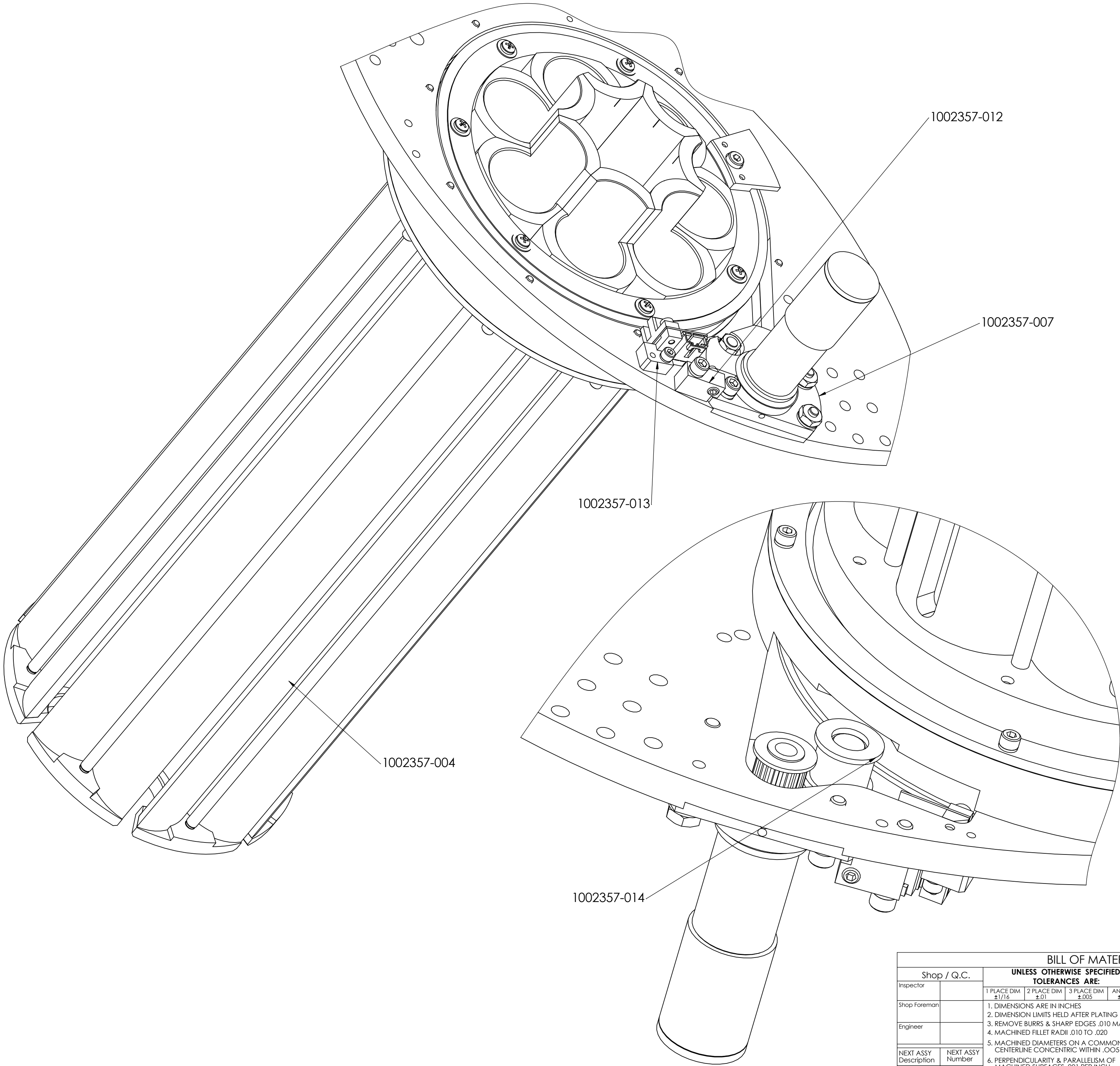
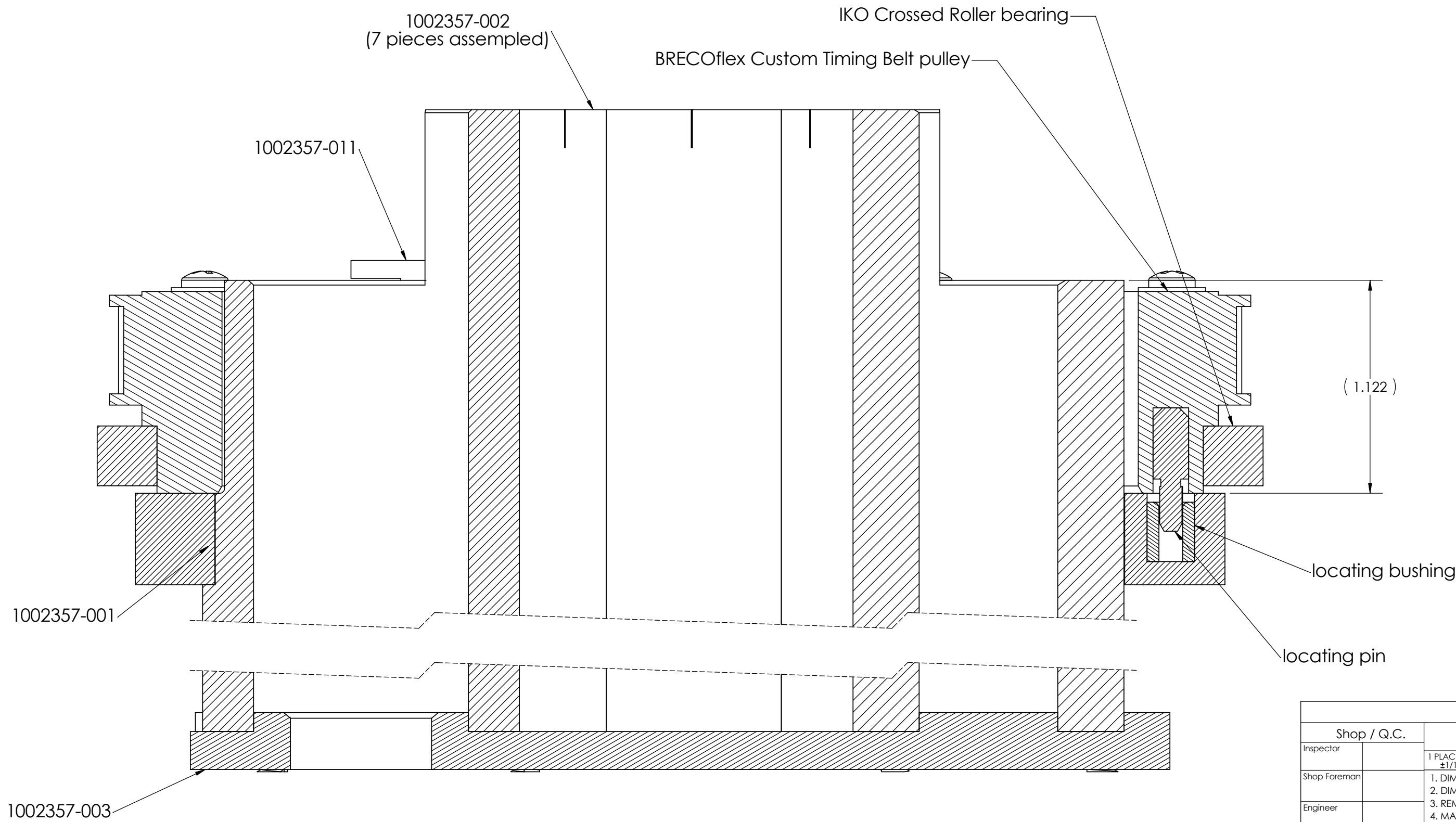
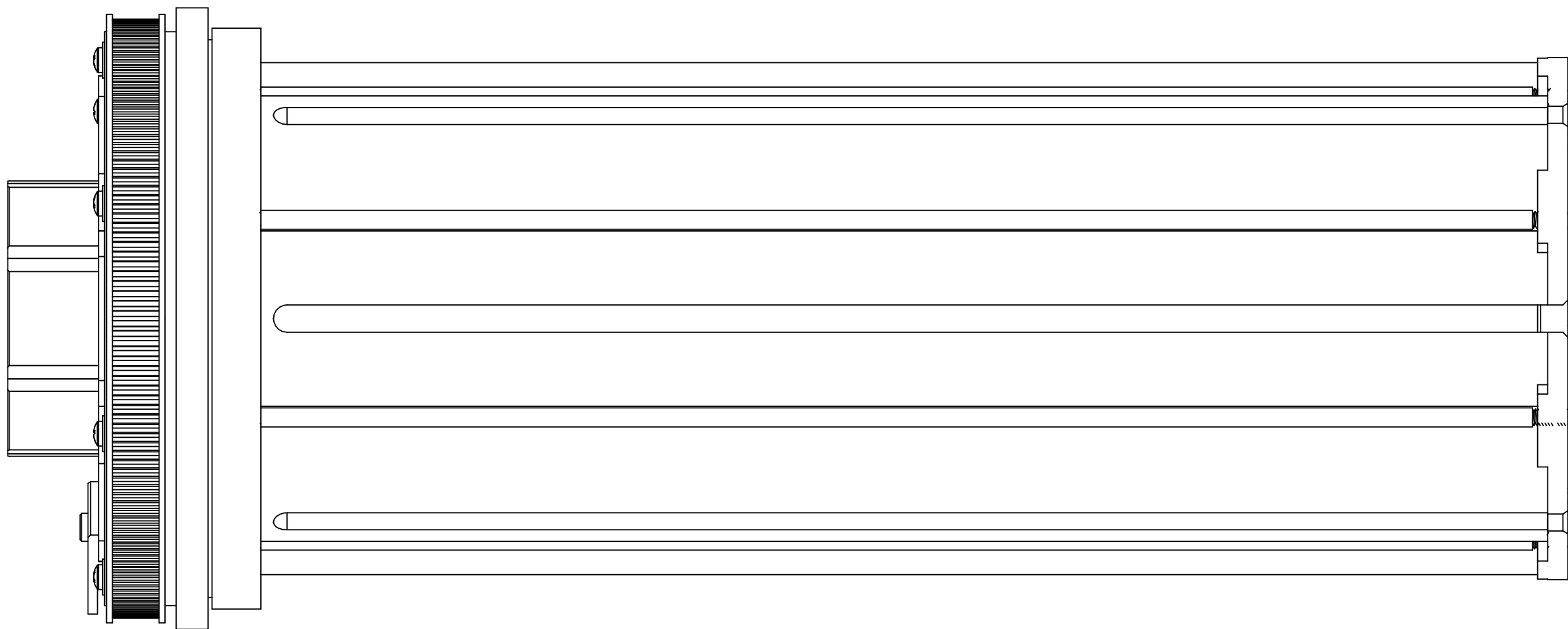
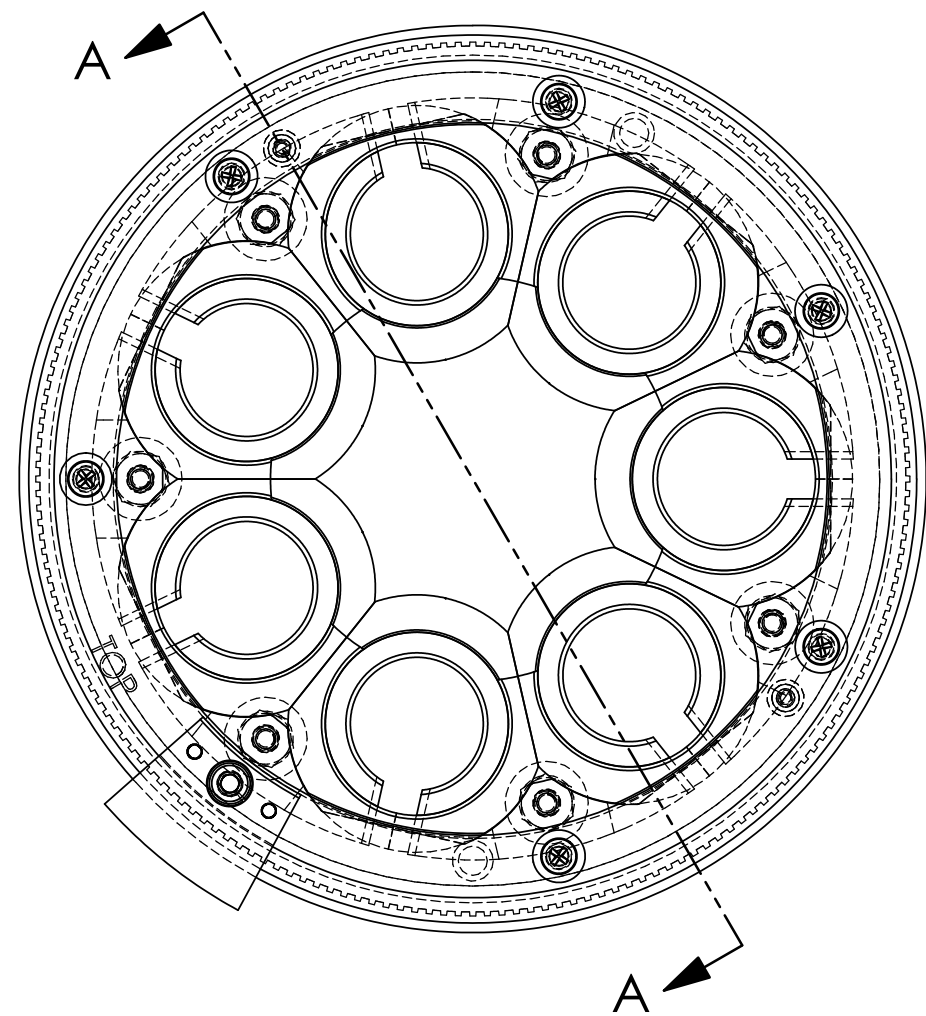


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BILL OF MATERIALS					last updated on: Thursday, August 04, 2005 10:02:20 AM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.01	3 PLACE DIM ±.005	ANGLES ±1°	Monterey Bay Aquarium Research Institute 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 .010 TO .020 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				
Engineer		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .010 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED				
NEXT ASSY Description	NEXT ASSY Number					
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209) SHEET 1 OF 11				

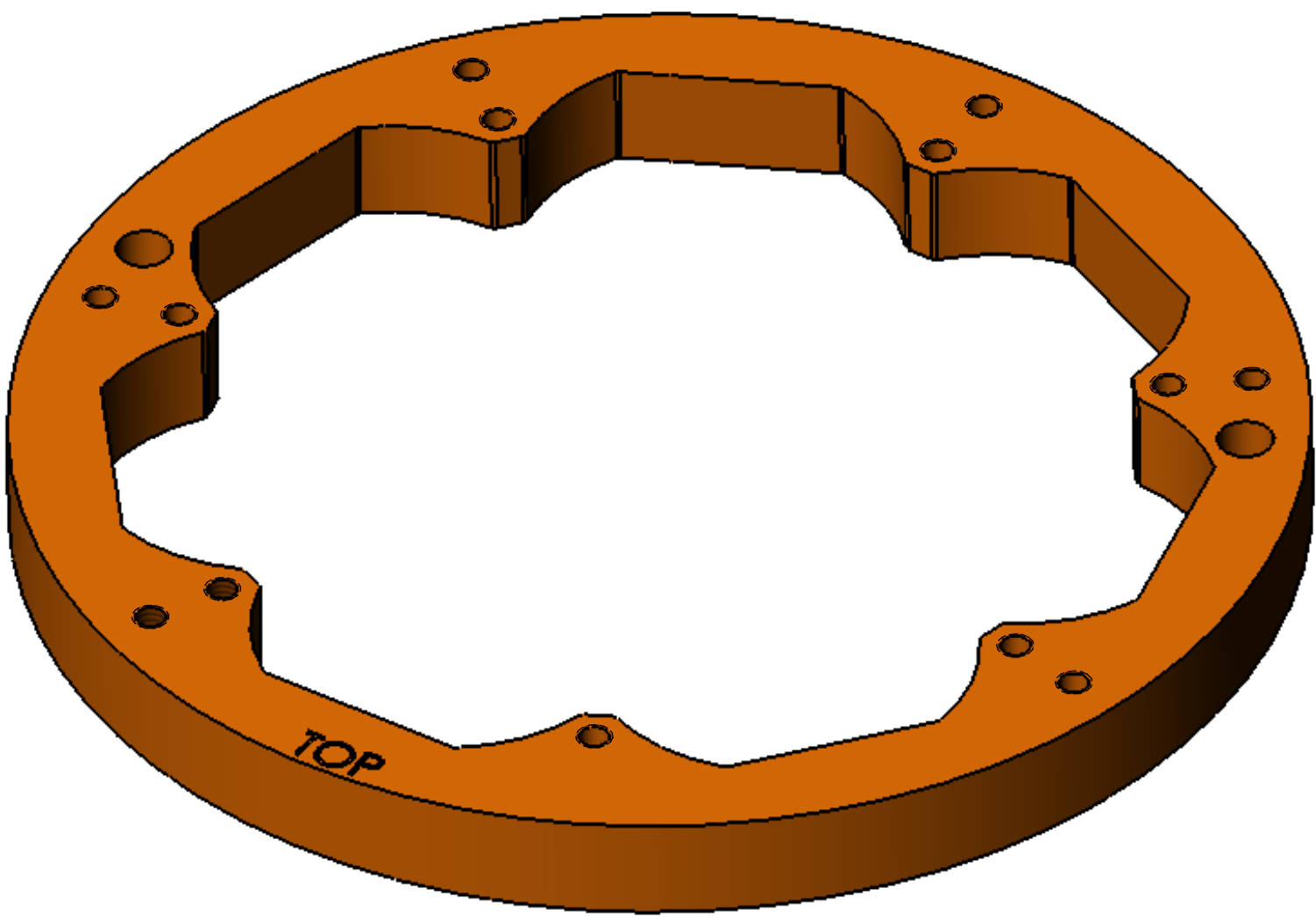
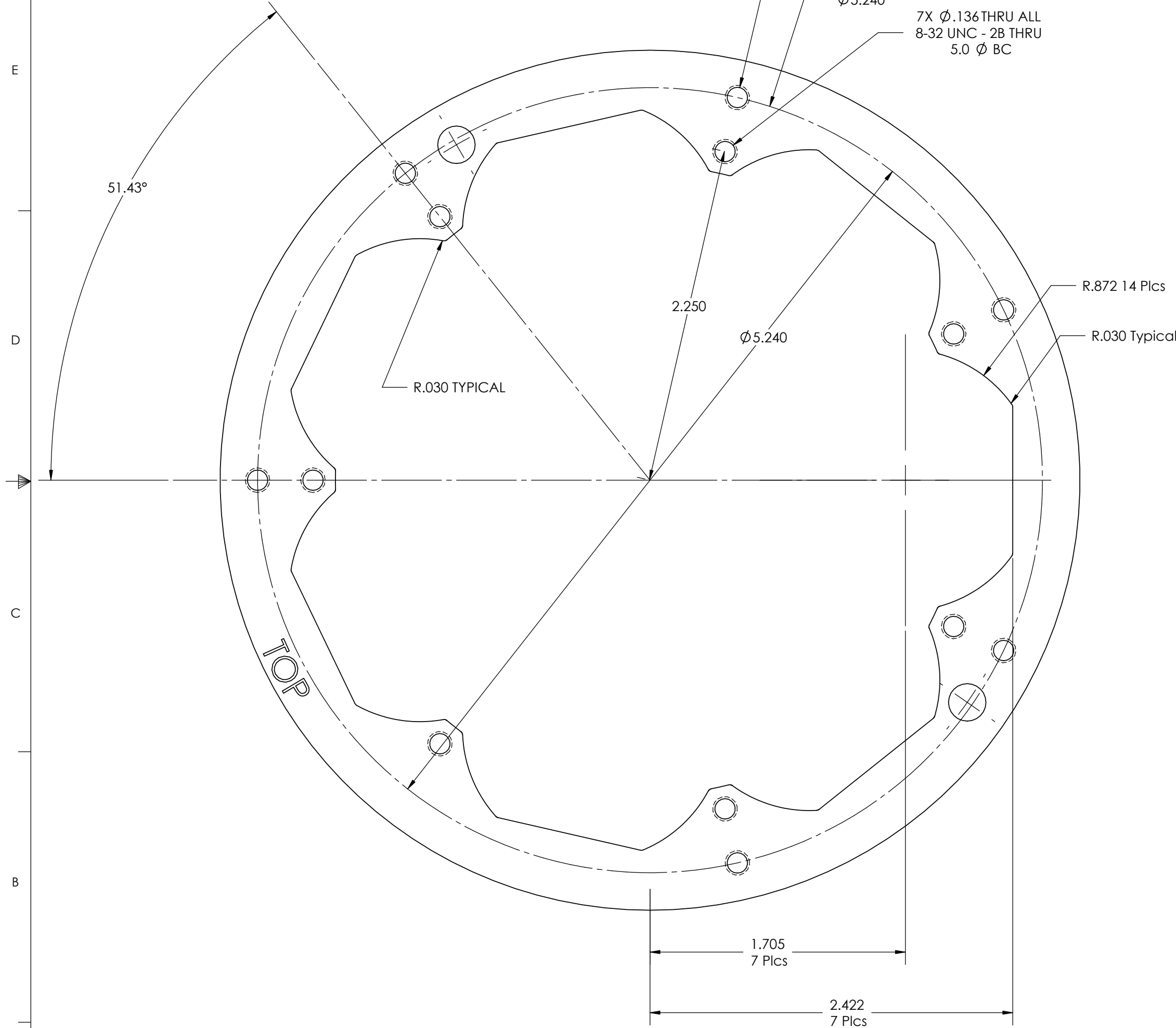


SECTION A-A

BILL OF MATERIALS					last updated on: Thursday, August 04, 2005 10:21:11 AM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE		
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.01	3 PLACE DIM ±.005	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 .010 TO .020 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .010 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED				
Engineer						
NEXT ASSY Description	NEXT ASSY Number			PROJECT NUMBER 701312.00	CAROUSEL (prototype)	
				PROJECT ESP 2G	SIZE C	
					DWG. NO. 1002357	
					REV. A	
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209) SHEET 2 OF 11				

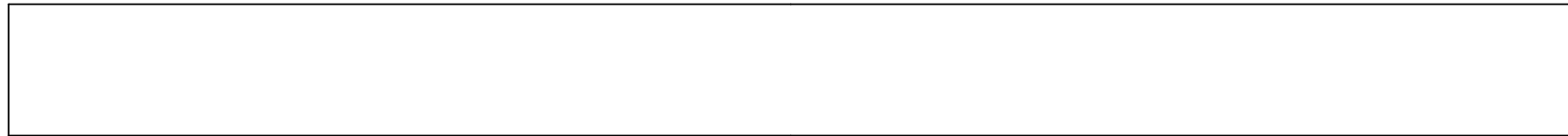
1002357-001
CAROUSEL TOP RING

F
E
D
C
B
A



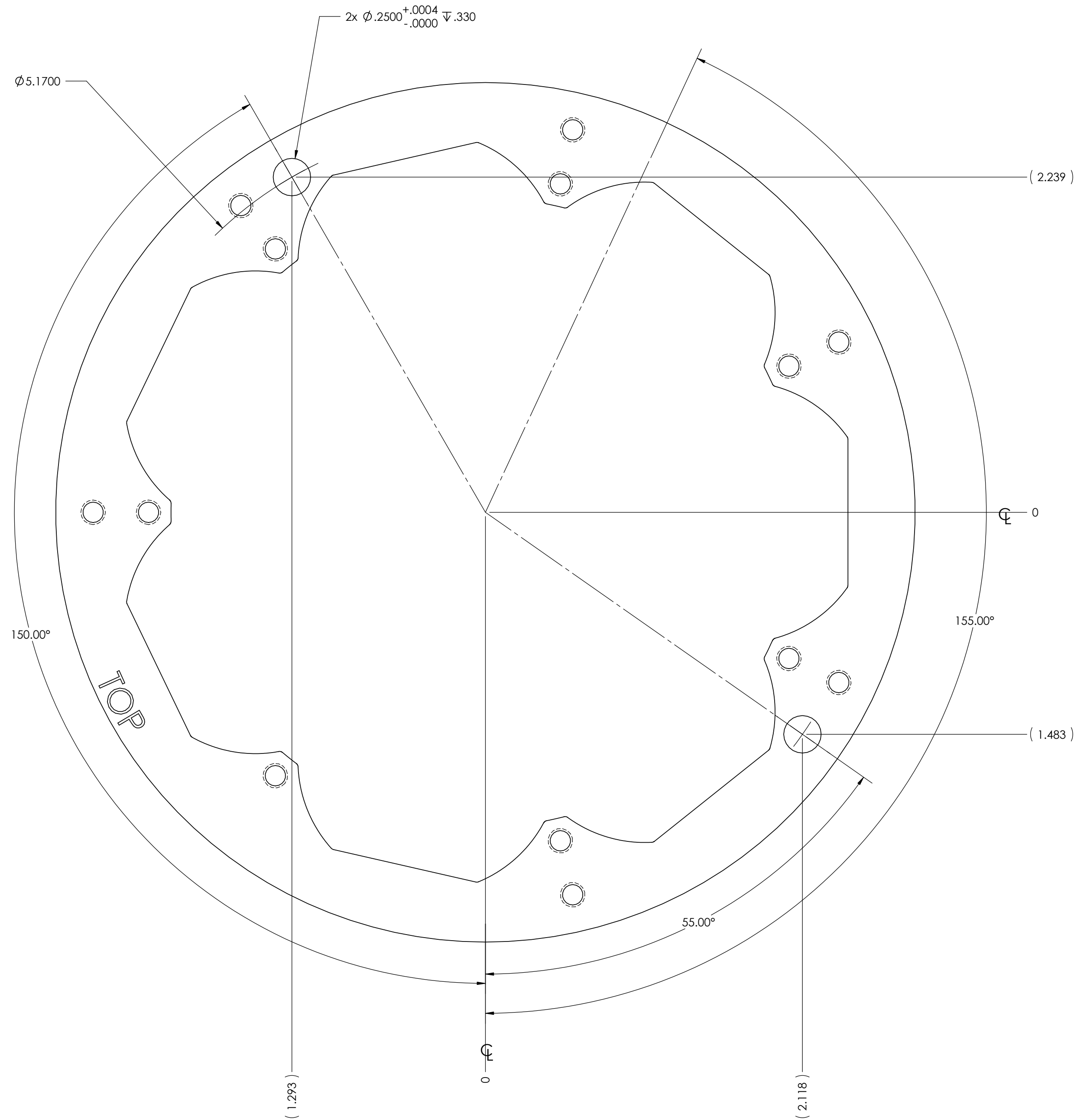
F
E
D
C
B
A

A



.483

ITEM NO.	PART NUMBER	DESCRIPTION	Material	QTY.
1	1002357-001	Top Ring	6061-T6 Aluminum	1
BILL OF MATERIALS				
Shop / Q.C.			last updated on: Thursday, August 04, 2005 10:21:11 AM	
Inspector		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	APPROVALS	DATE
Shop Foreman		1 PLACE DIM $\pm$ 1/16	ENGINEER Jason Feldman 831-775-1837	Monterey Bay Aquarium Research Institute 7700 Sandholdt Road Moss Landing, CA 95039
Engineer		2 PLACE DIM $\pm$.01	CHECKED	
NEXT ASSY Description	NEXT ASSY Number	3 PLACE DIM $\pm$.005	PROJECT NUMBER 701312.00	CAROUSEL (prototype)
		ANGLES $\pm$ 1°	PROJECT ESP 2G	SIZE C
		1. DIMENSIONS ARE IN INCHES	DWG. NO. 1002357	REV A
		2. DIMENSION LIMITS HELD AFTER PLATING		
		3. REMOVE BURRS & SHARP EDGES .010 MAX		
		4. MACHINED FILLET RADII .010 TO .020		
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX. .010 INCHES FOR SINGLE SURFACE.		
		7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED		
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209) SHEET 3 OF 11		

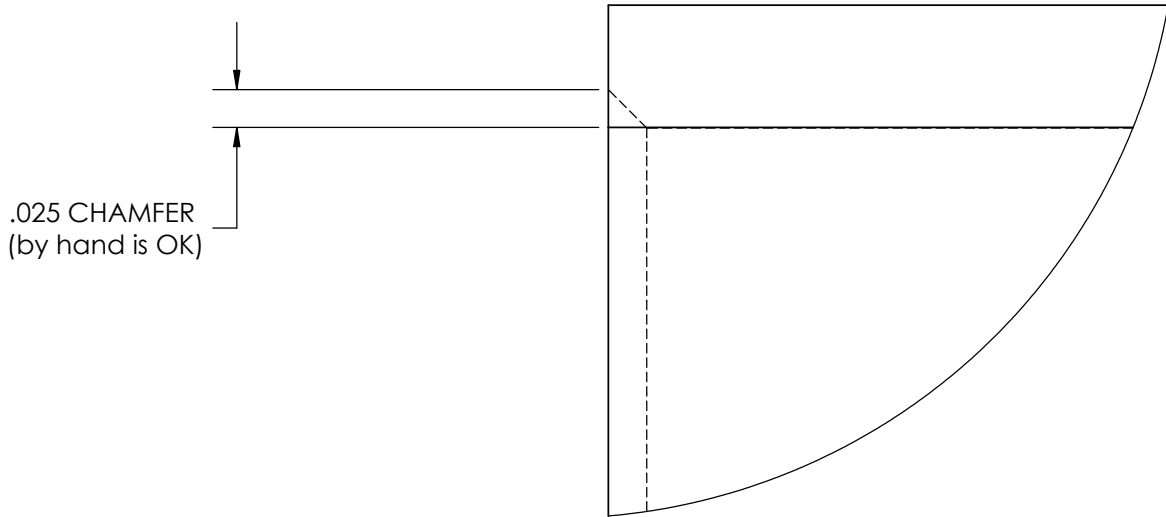
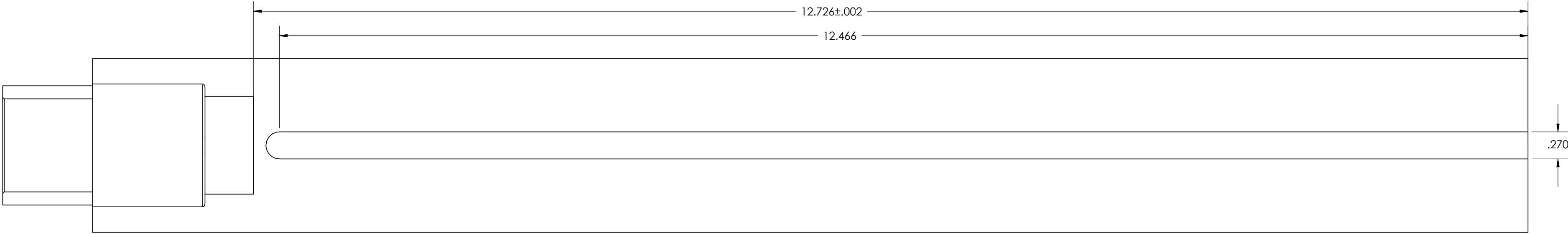


Material: 6061-T6 Aluminum

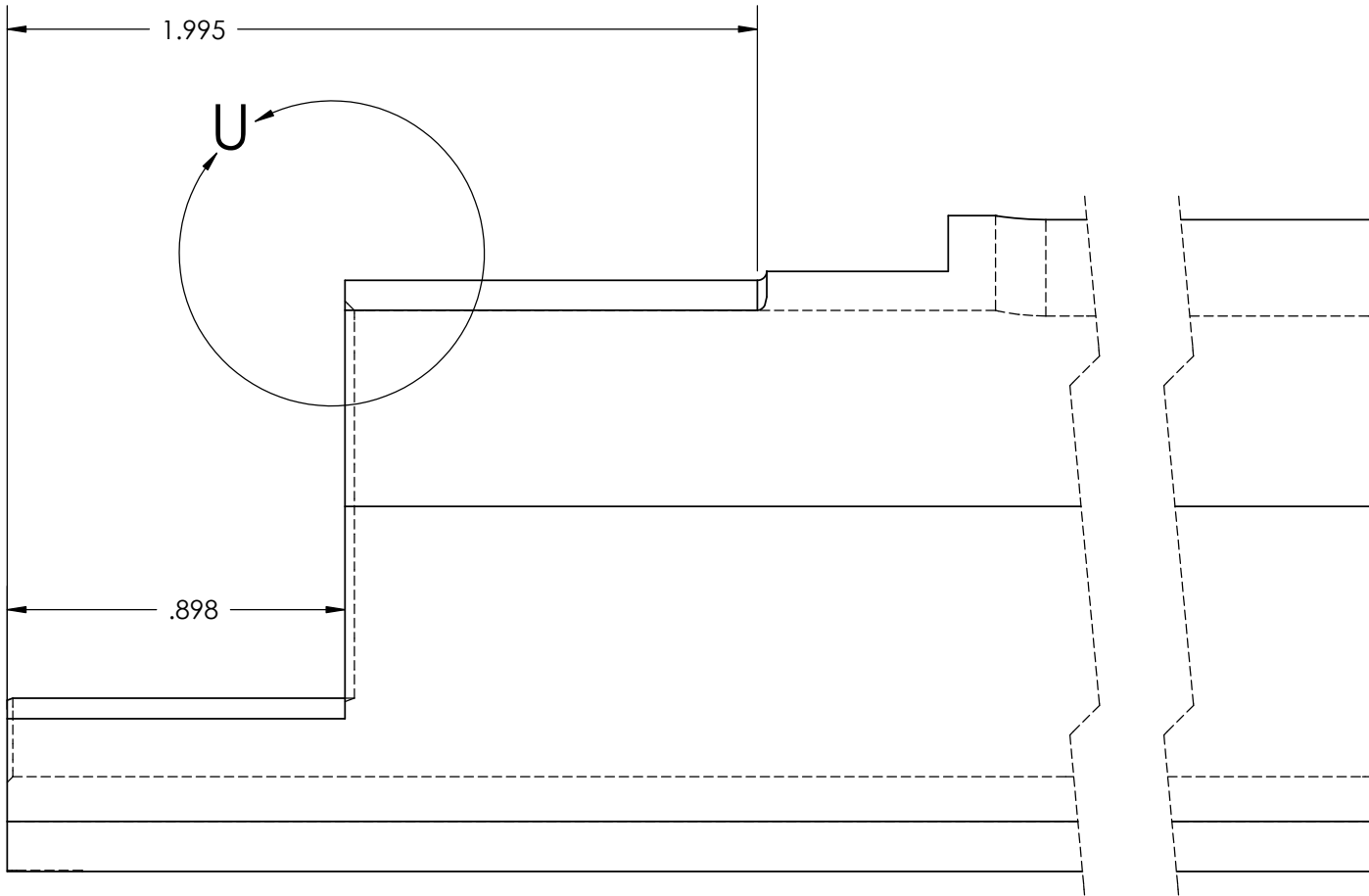
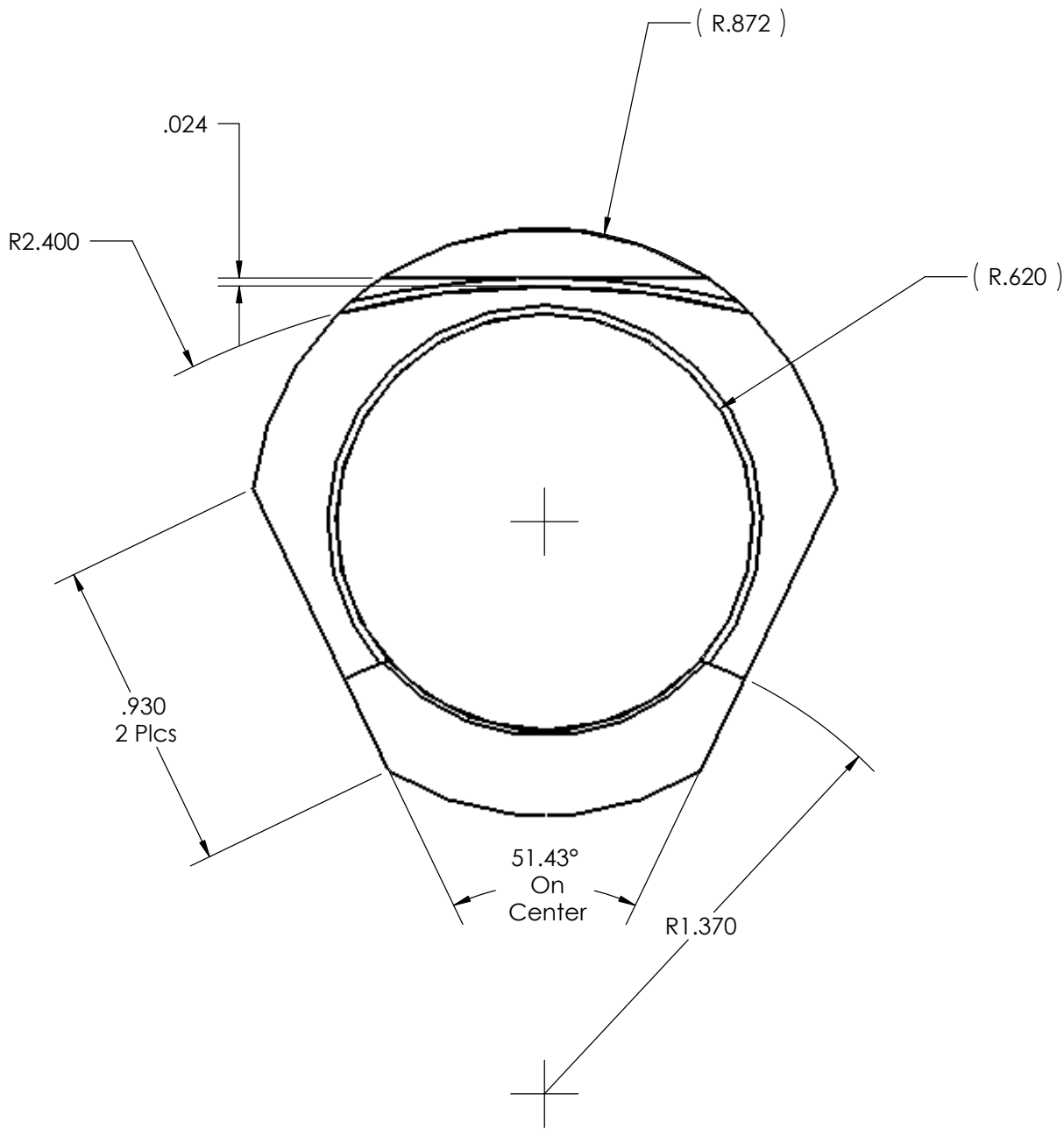
BILL OF MATERIALS				Last updated on: Thursday, August 04, 2005 10:21:11 AM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE	
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.01	3 PLACE DIM ±.005	ANGLES ±1'
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .010 TO .020 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .010 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED			
Engineer					
NEXT ASSY Description	NEXT ASSY Number	PROJECT NUMBER 701312.00		Monterey Bay Aquarium Research Institute	
		PROJECT ESP 2G		7700 Sandholdt Road Moss Landing, CA 95039	
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)		CAROUSEL (prototype)	
				SIZE C	DWG. NO. 1002357
				REV. A	
				SHEET 4 OF 11	

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1002357-002
CAROUSEL TUBE

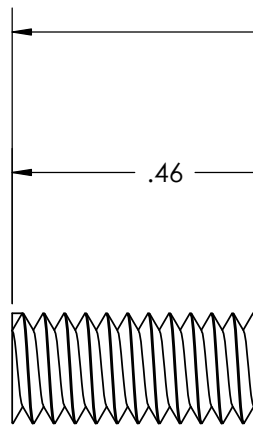
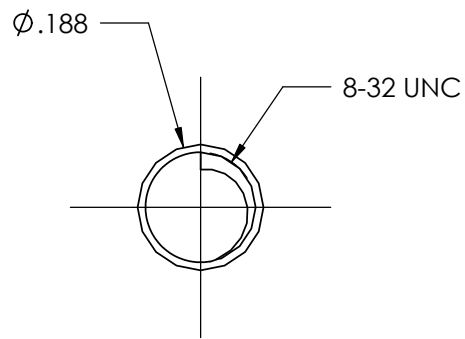
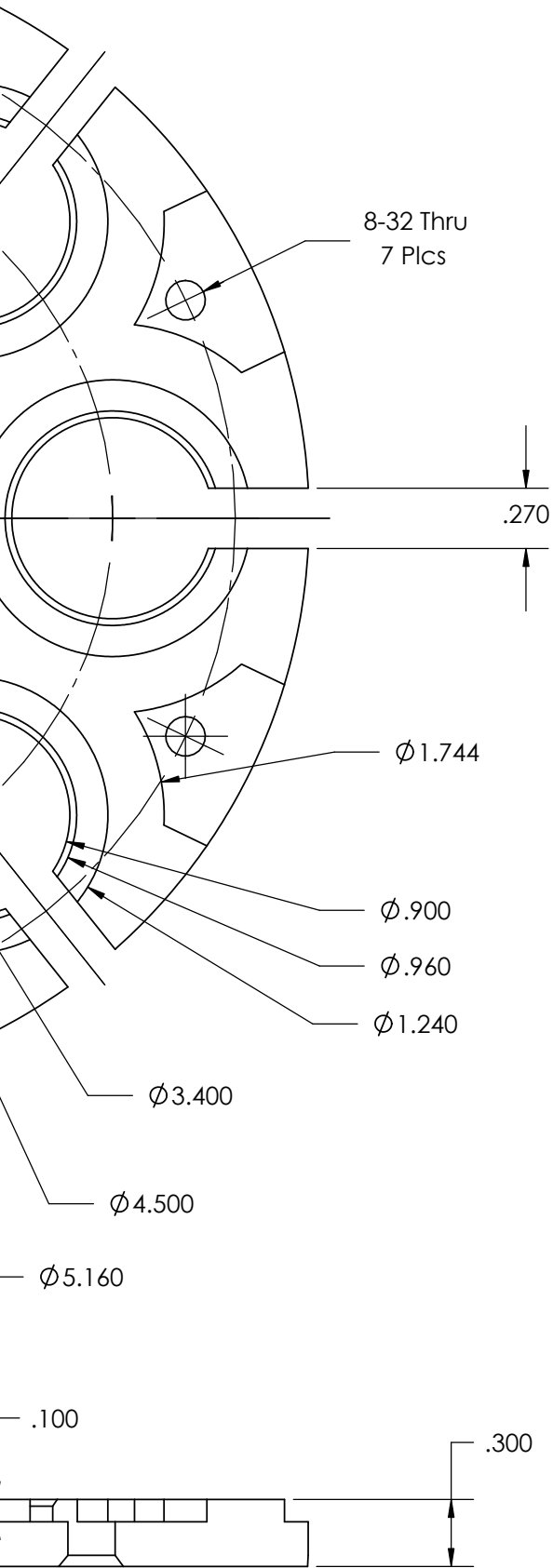


DETAIL U



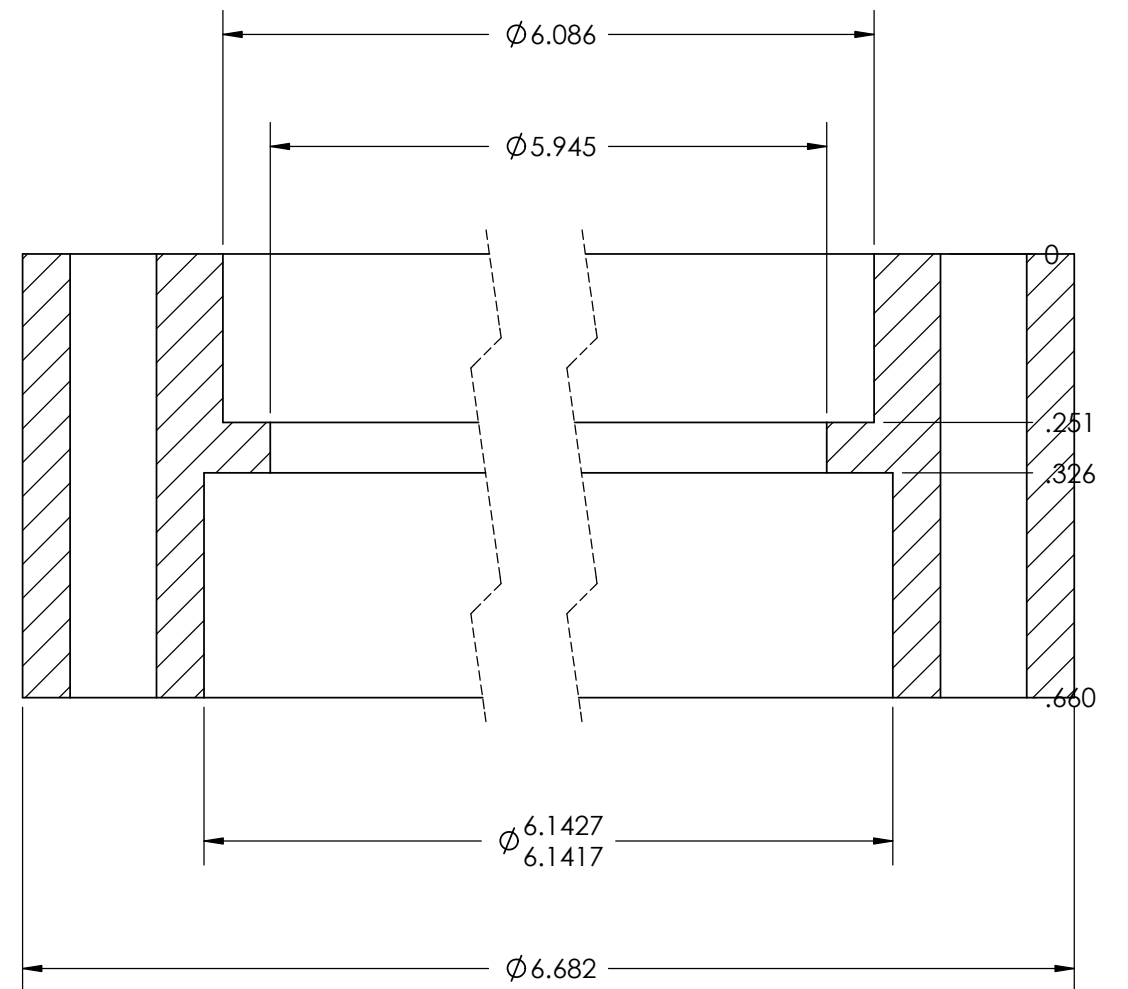
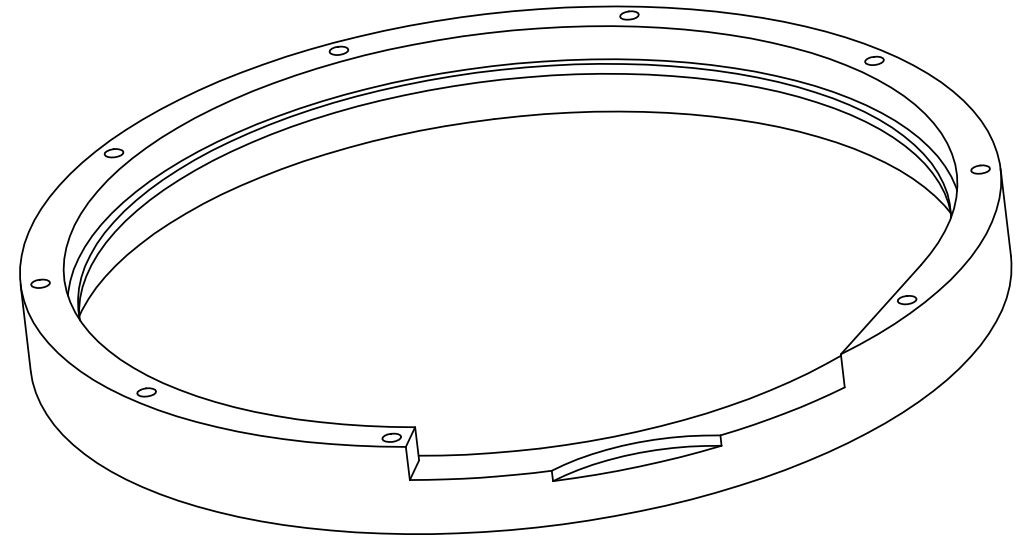
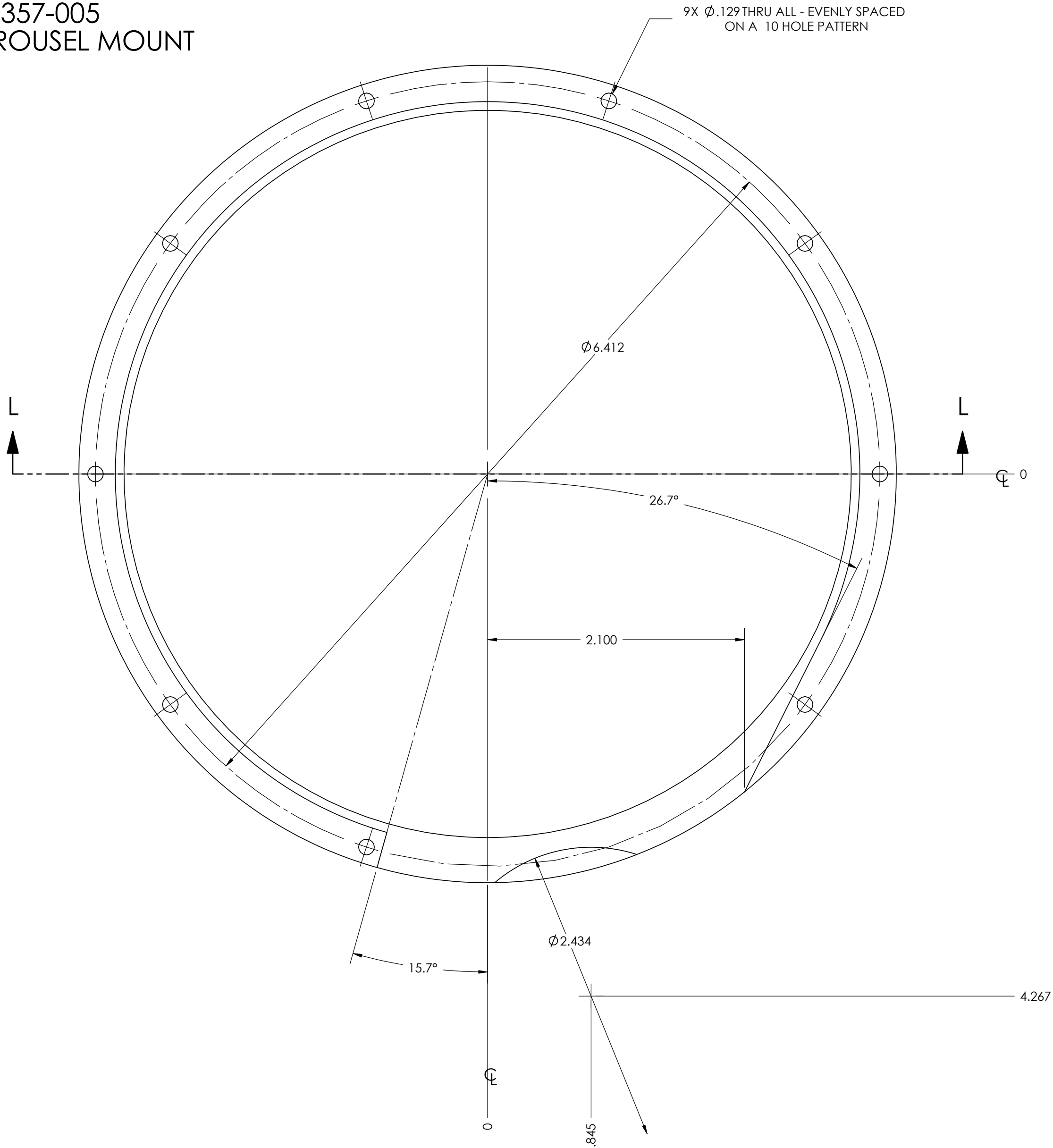
Material: Cast Acrylic Tube

BILL OF MATERIALS				Revision on:	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS	DATE
Inspector				ENGINEER	
Shop Foreman		1 PLACE DIM ±1/16	2 PLACE DIM ±.01	3 PLACE DIM ±.005	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 .010 TO .020 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .010 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED			
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)	
		Monterey Bay Aquarium Research Institute		7700 Sandholdt Road Moss Landing, CA 95039	
		CAROUSEL (prototype)		SIZE	C
		DWG. NO.		1002357	
		REV.		A	
		SHEET 5 OF 11			

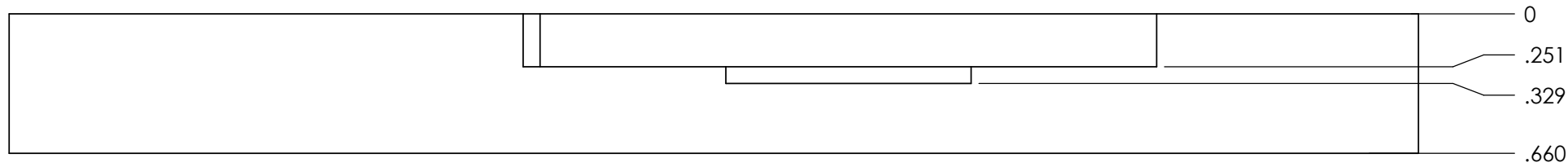


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1002357-005
CAROUSEL MOUNT



SECTION L-L
SCALE 3.5 : 1



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
5	1002357-005	Bearing mount	6061-T6 Aluminum	1

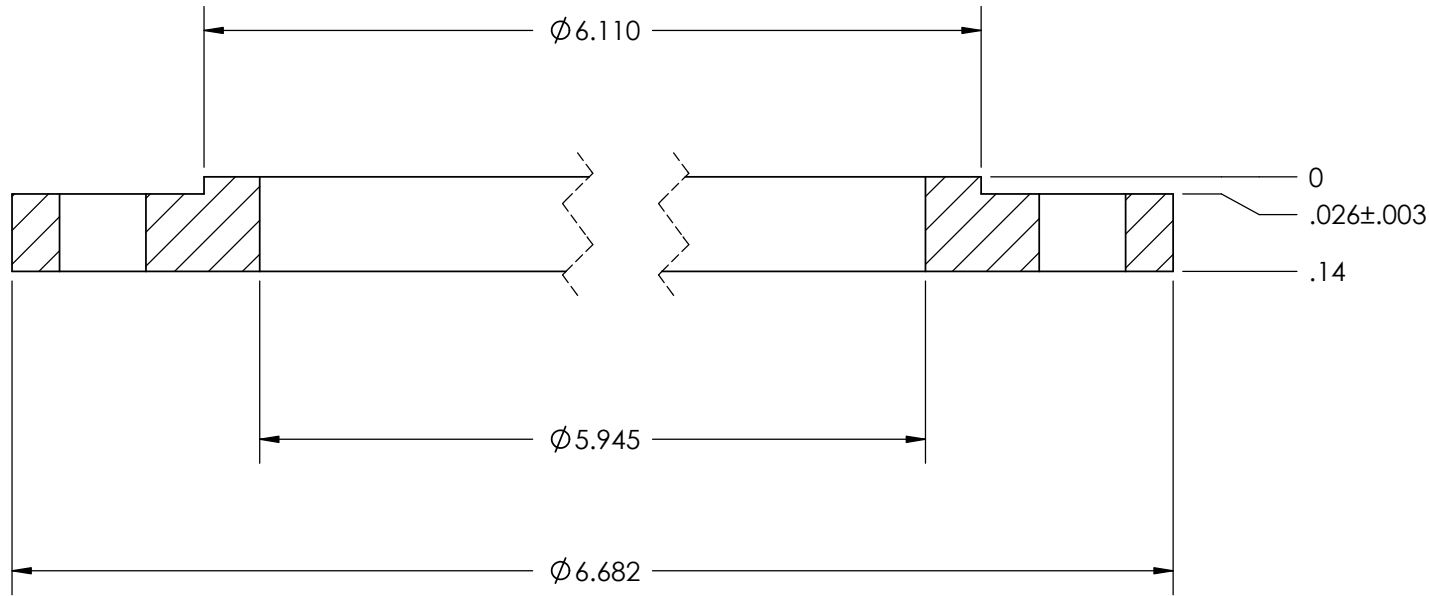
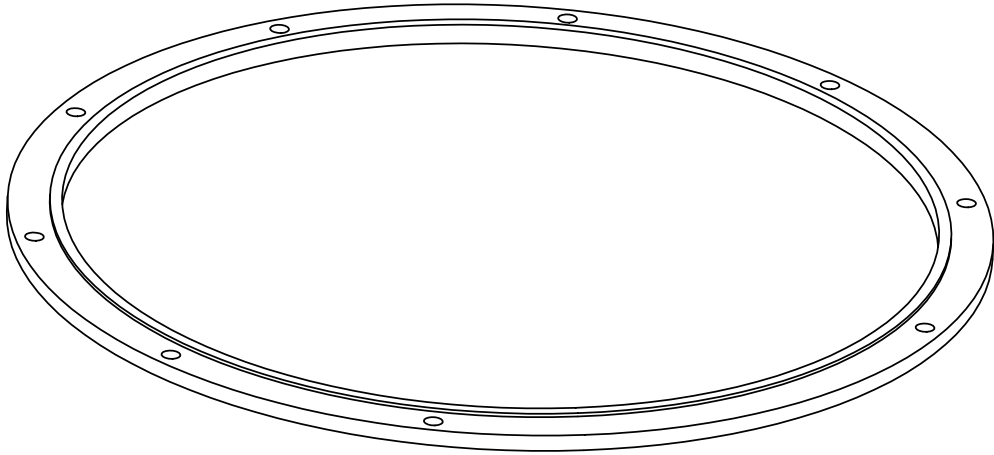
BILL OF MATERIALS					last updated on: Thursday, August 04, 2005 10:21:11 AM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS	DATE
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.01	3 PLACE DIM ±.005	ANGLES ±1°	Monterey Bay Aquarium Research Institute 7700 Sandholdt Road Moss Landing, 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 .010 TO .020 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				
Engineer		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .010 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED				
NEXT ASSY Description	NEXT ASSY Number	PROJECT NUMBER 701312.00				
DO NOT SCALE DRAWING		PROJECT		ESP 2G	SIZE	C
		DWG. NO.		1002357		REV
						A
		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)				SHEET 7 OF 11

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1002357-006
CAROUSEL BEARING CLAMP

9X Ø.129 THRU ALL - EVENLY SPACED
ON A 10 HOLE PATTERN

Ø6.412

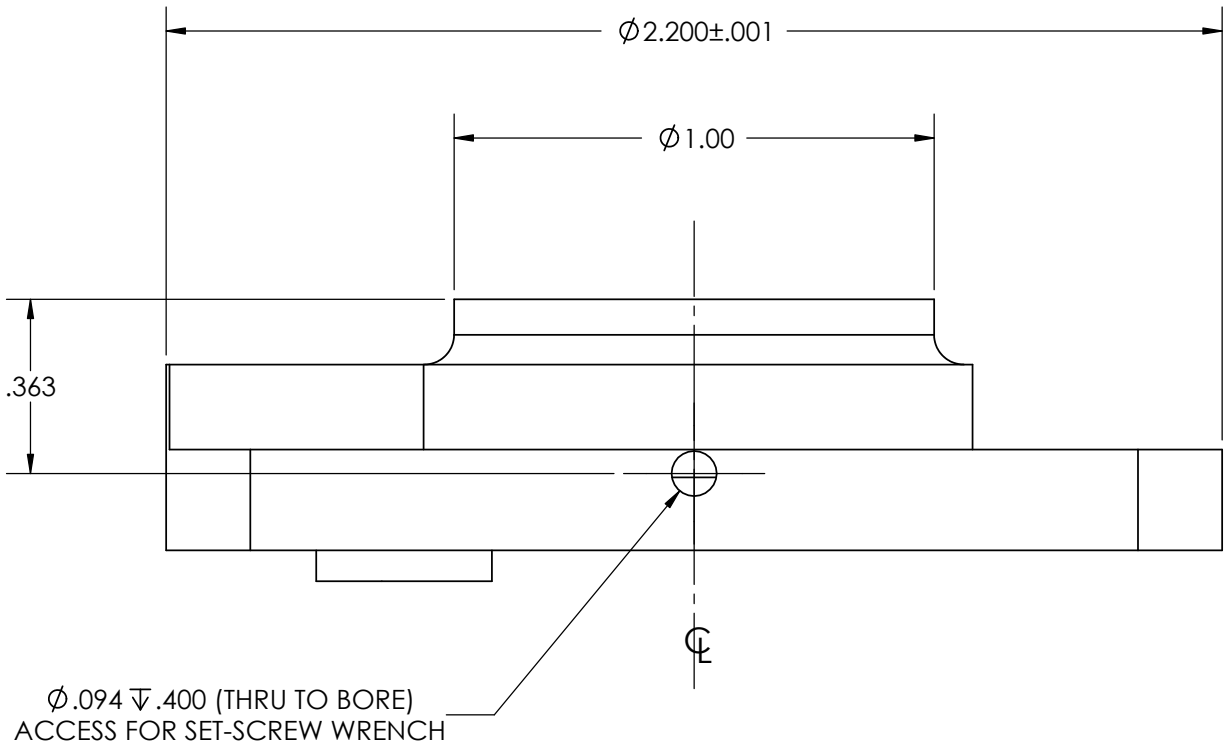
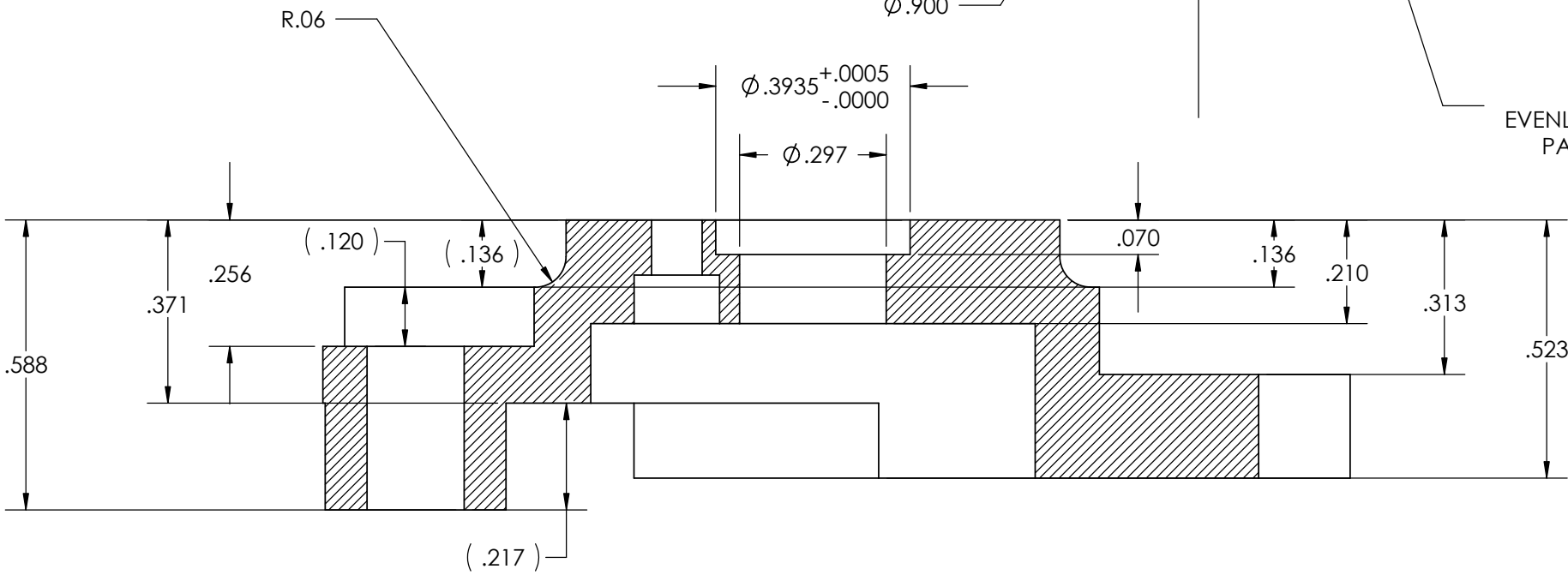
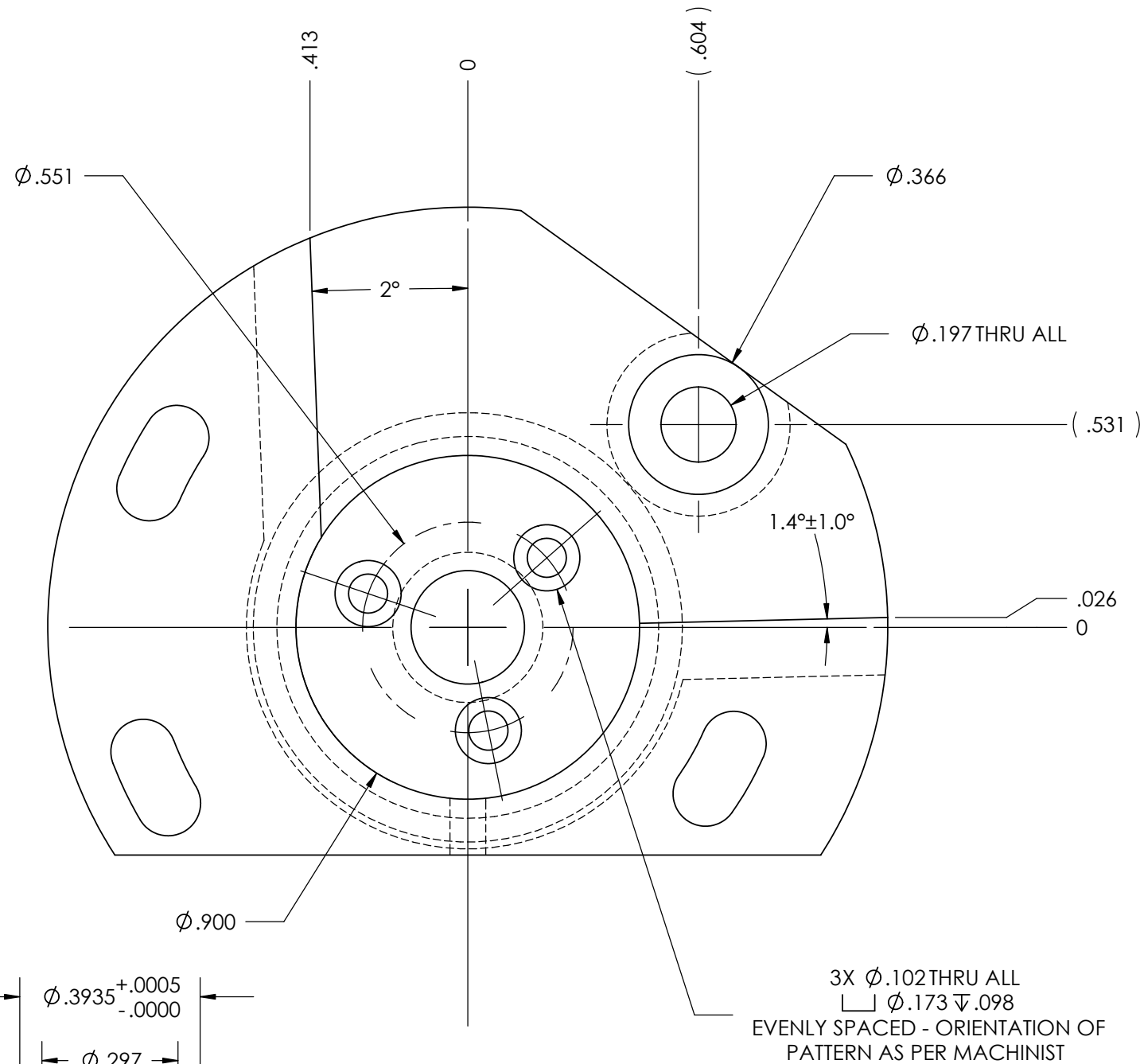
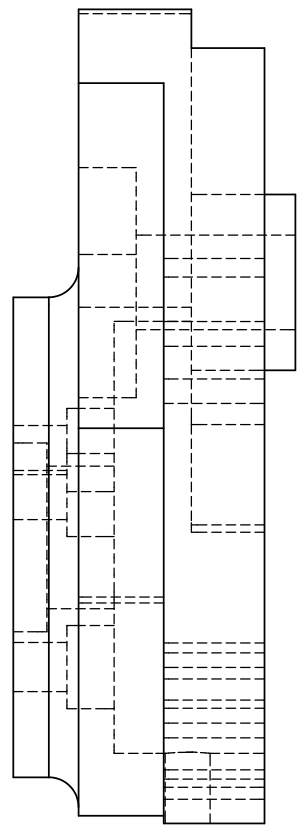
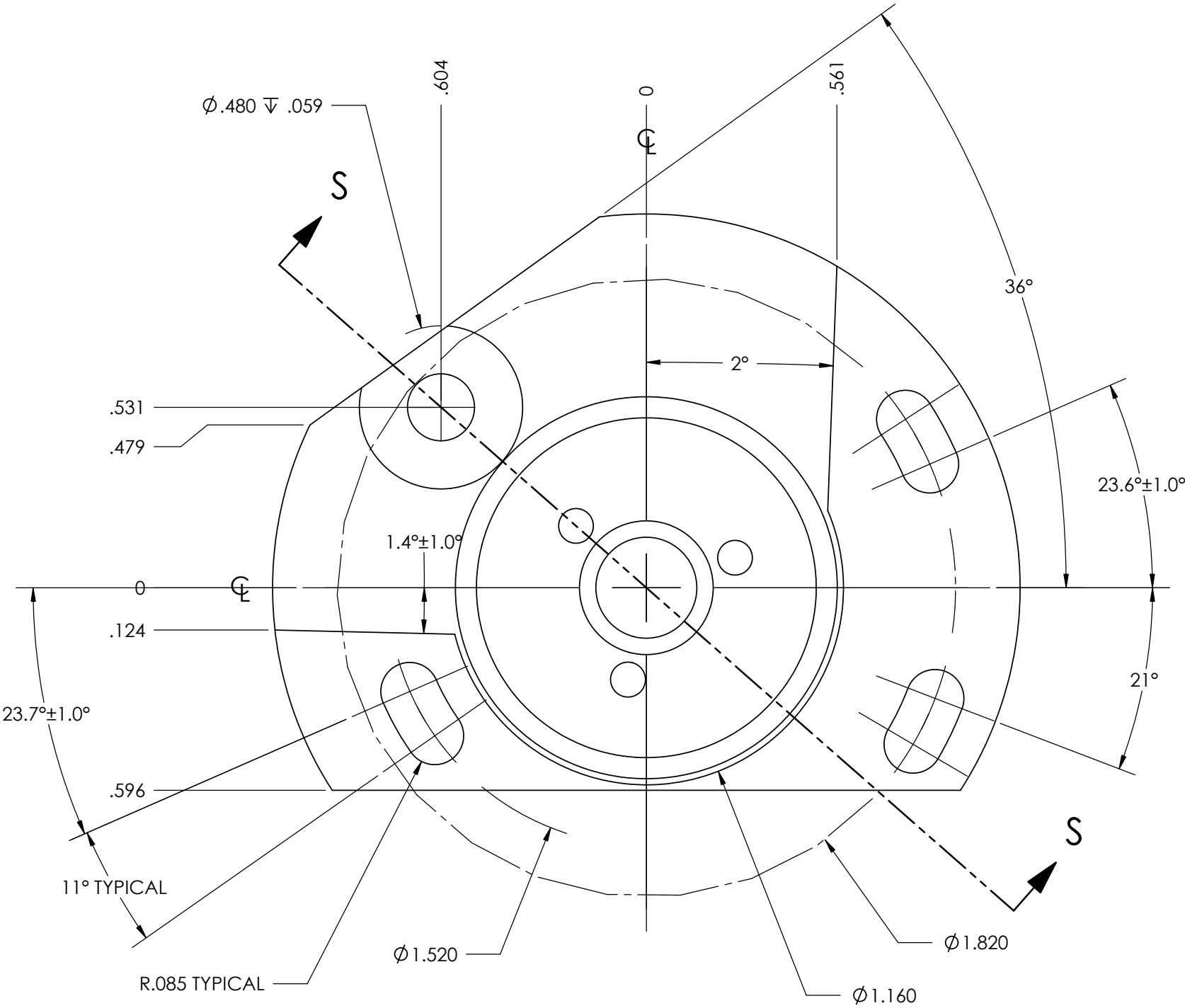
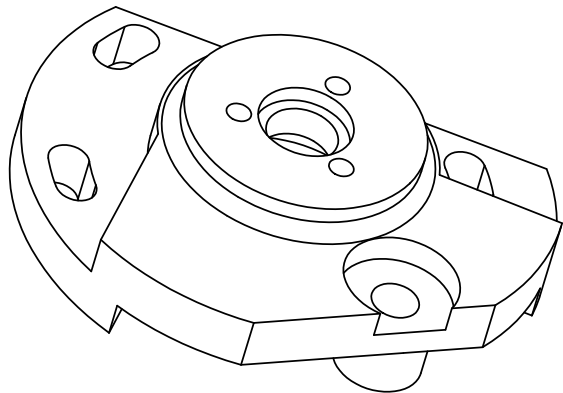
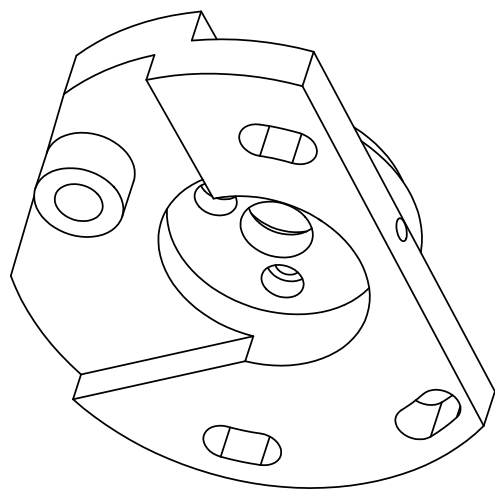
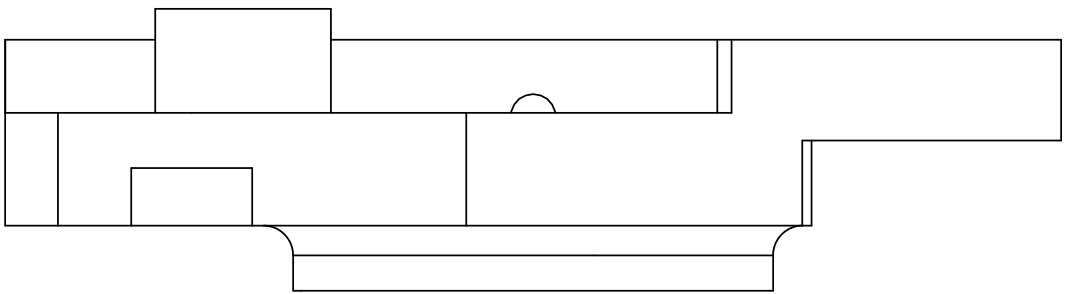


SECTION N-N
SCALE 3.5 : 1

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
6	1002357-006	Bearing retainer	6061-T6 Aluminum or Stainless Steel	1

BILL OF MATERIALS				last updated on: Thursday, August 04, 2005 10:21:11 AM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: 1 PLACE DIM ±1/16 2 PLACE DIM ±.01 3 PLACE DIM ±.005 ANGLES ±1° 1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .010 TO .020 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .010 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED		APPROVALS DATE	
Inspector				ENGINEER Jason Feldman 831-775-1837	
Shop Foreman				Monterey Bay Aquarium Research Institute 7700 Sandholdt Road Moss Landing, CA 95039	
Engineer				M B A R I 	
NEXT ASSY Description	NEXT ASSY Number	PROJECT NUMBER 701312.00		CAROUSEL (prototype)	
DO NOT SCALE DRAWING		PROJECT ESP 2G		SIZE C	DWG. NO. 1002357
				REV A	
CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209) SHEET 8 OF 11					

1002357-007
CAROUSEL MOTOR MOUNT



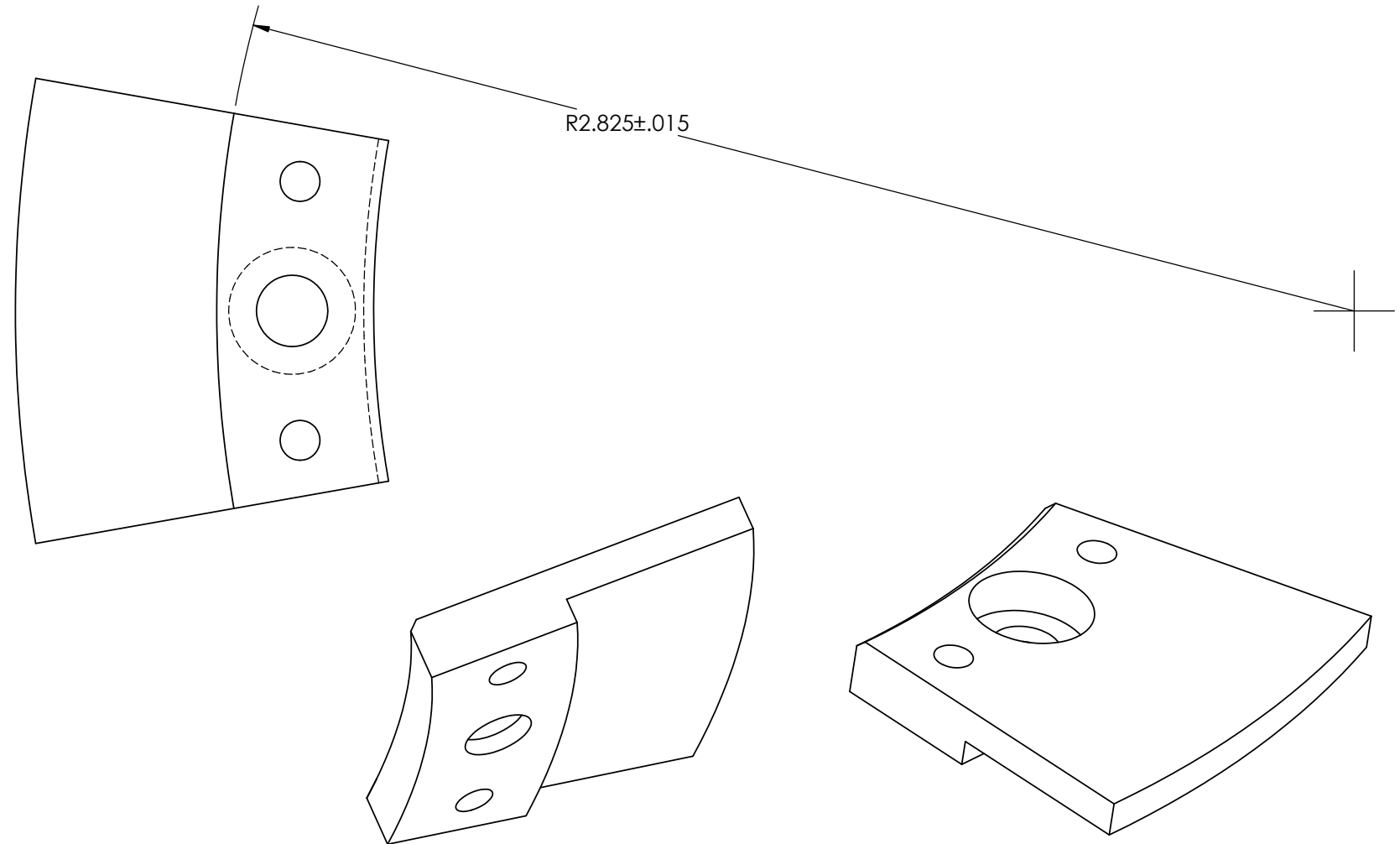
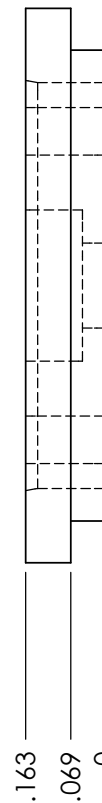
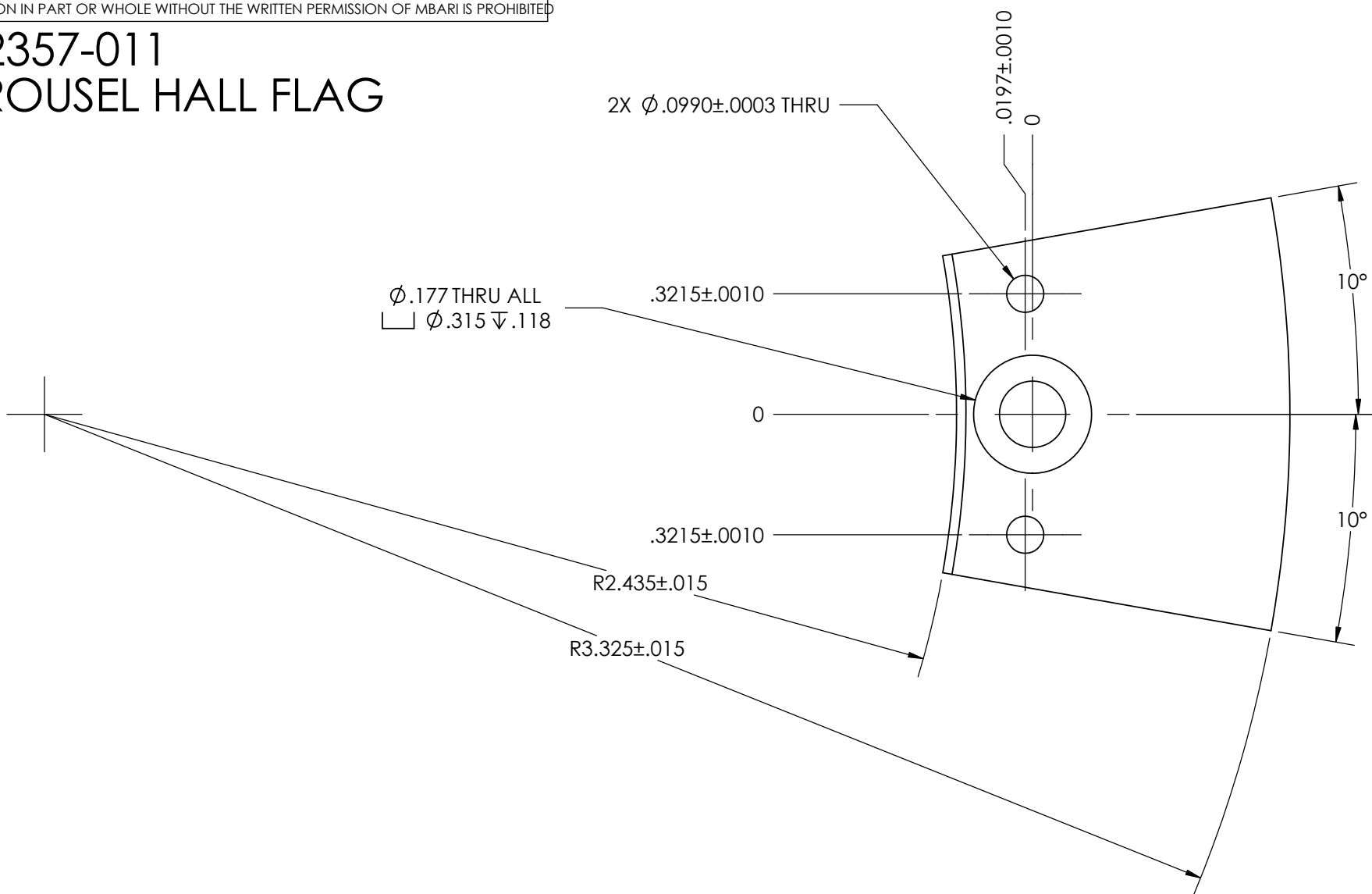
SECTION S-S

ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
7	1002357-007	Motor mount	6061-T6 Aluminum	1

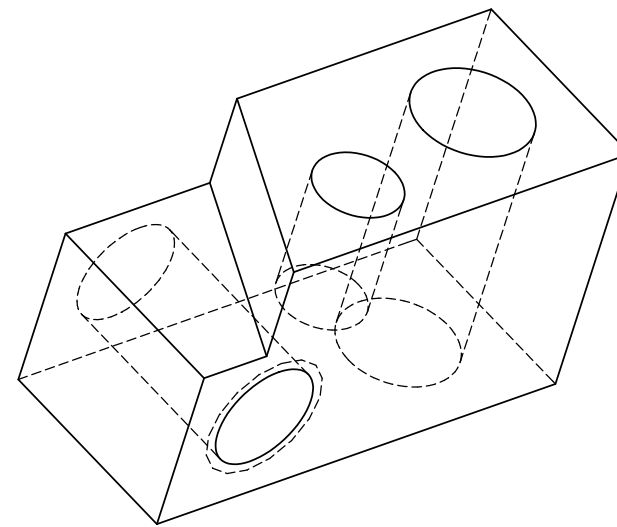
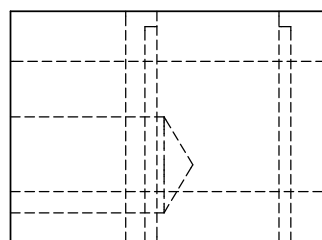
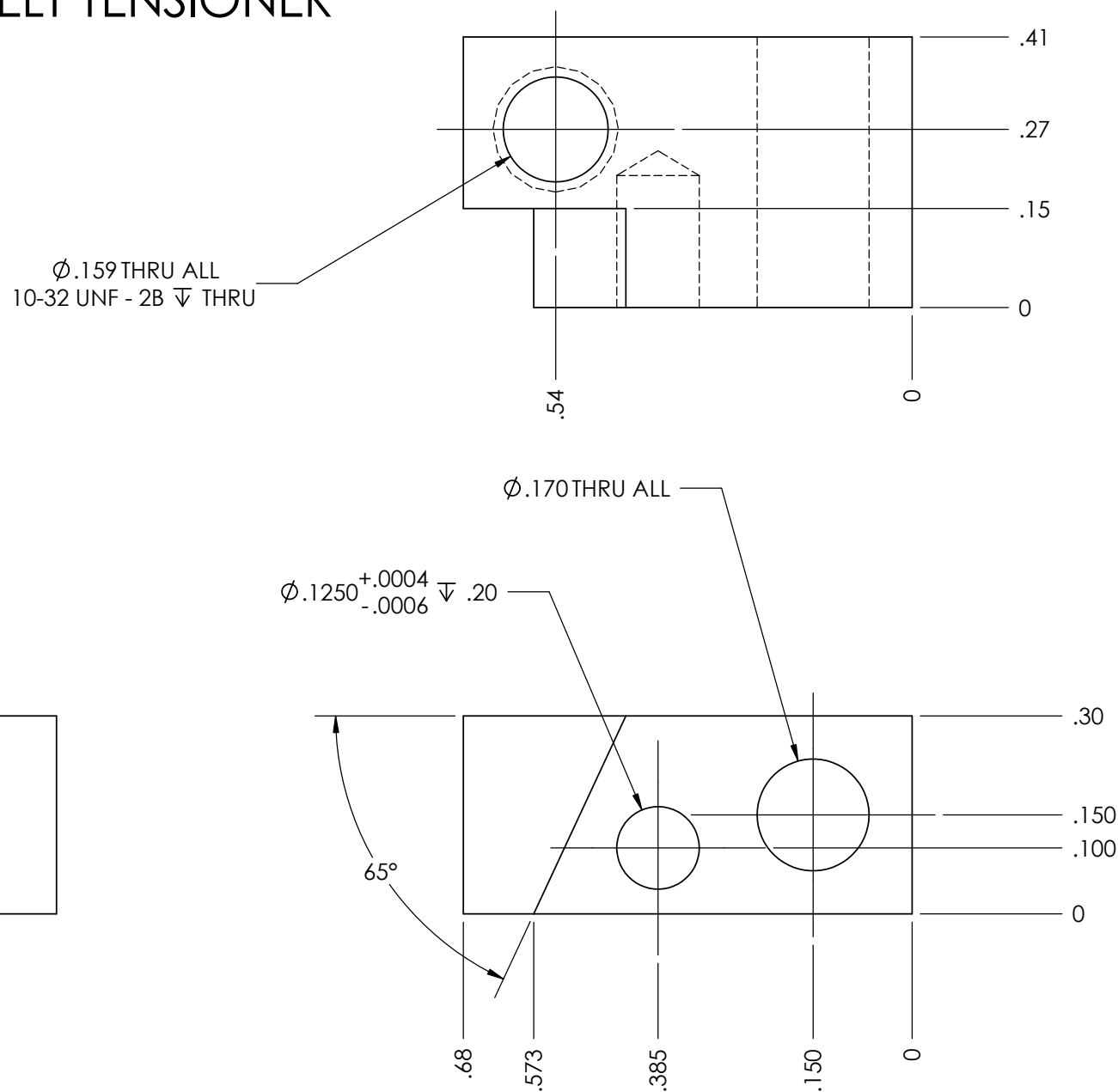
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS		DATE	
Inspector		1 PLACE DIM $\pm 1/16$	2 PLACE DIM $\pm .01$	3 PLACE DIM $\pm .005$	ANGLES $\pm 1^\circ$	ENGINEER	
Shop Foreman		1. DIMENSIONS ARE IN INCHES				Jason Feldman	
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING				831-775-1837	
NEXT ASSY Description		3. REMOVE BURRS & SHARP EDGES .010 MAX				CHECKED	
NEXT ASSY Number		4. MACHINED FILLET RADII .010 TO .020				PROJECT NUMBER	
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005				701312.00	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .010 INCHES FOR SINGLE SURFACE.				PROJECT	
		7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED				ESP 2G	
DO NOT SCALE DRAWING		CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)				SHEET 9 OF 11	

Monterey Bay Aquarium Research Institute		CAROUSEL (prototype)	
7700 Sandholdt Road		SIZE	
Moss Landing, CA		C	
95039		DWG. NO.	
		1002357	
		REV	
		A	

1002357-011
CAROUSEL HALL FLAG

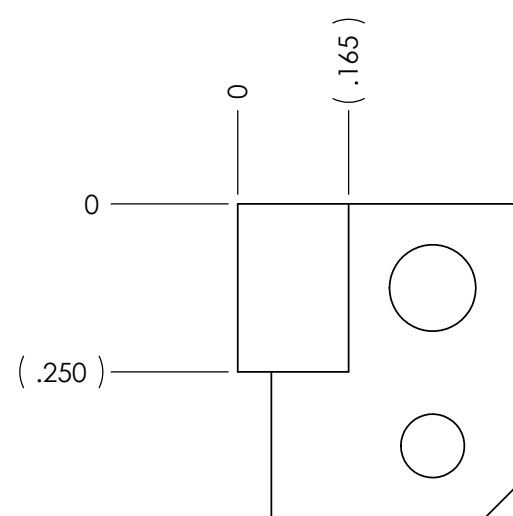
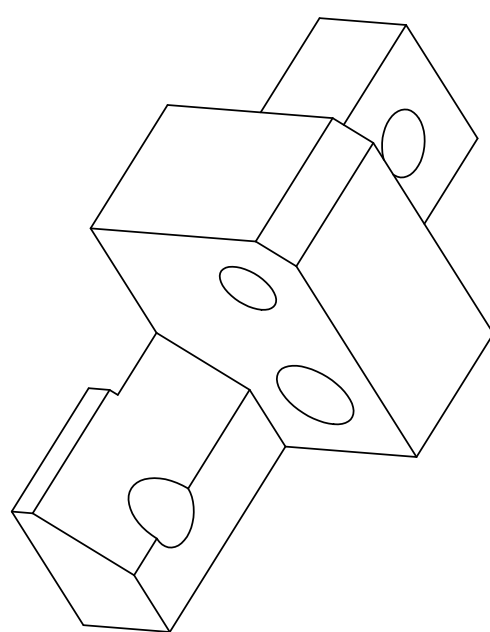
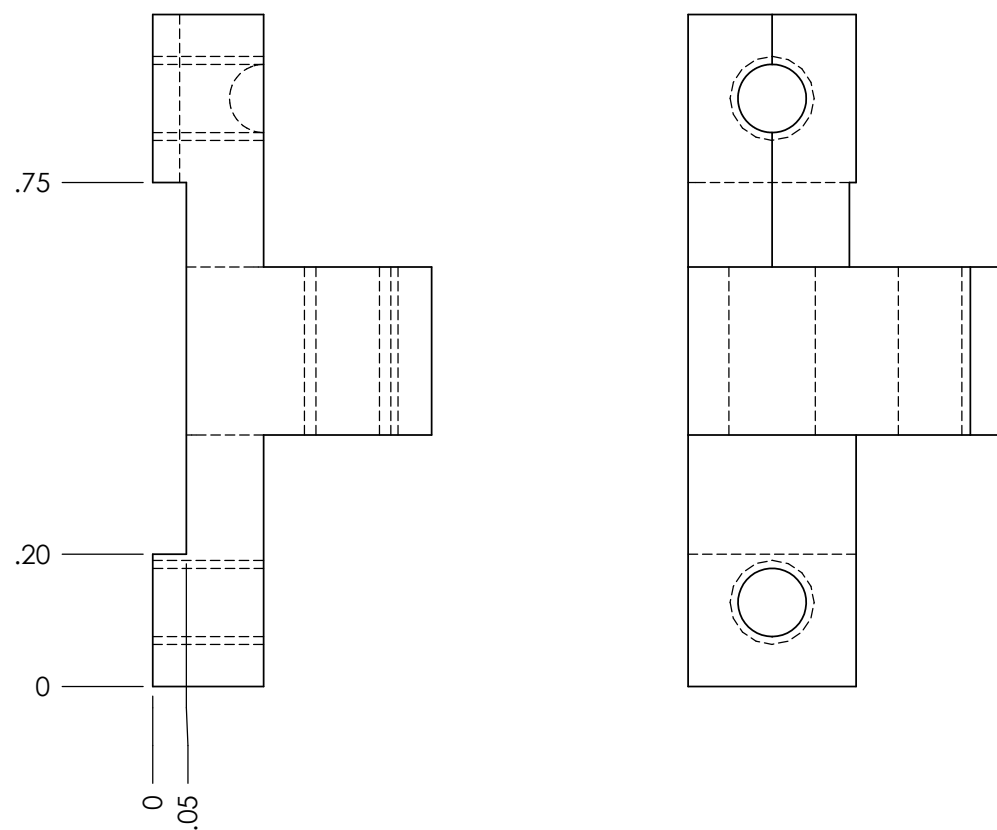
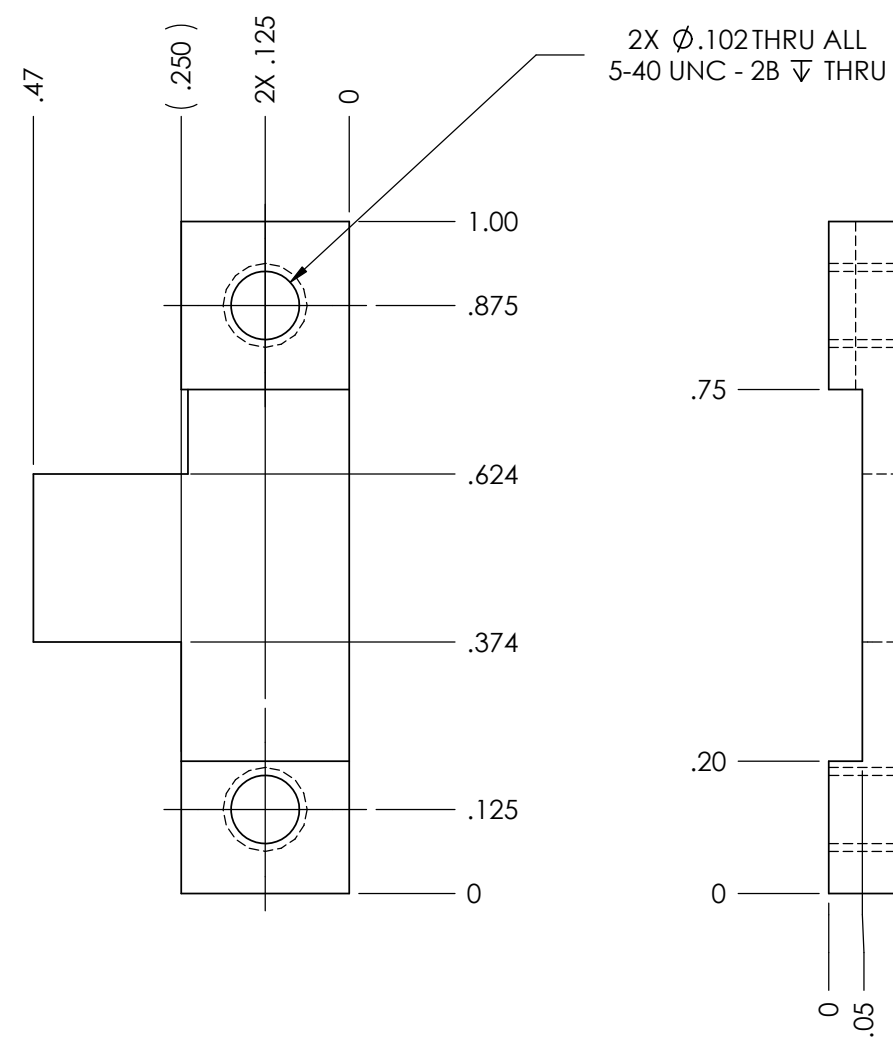


1002357-012
CAROUSLE BELT TENSIONER

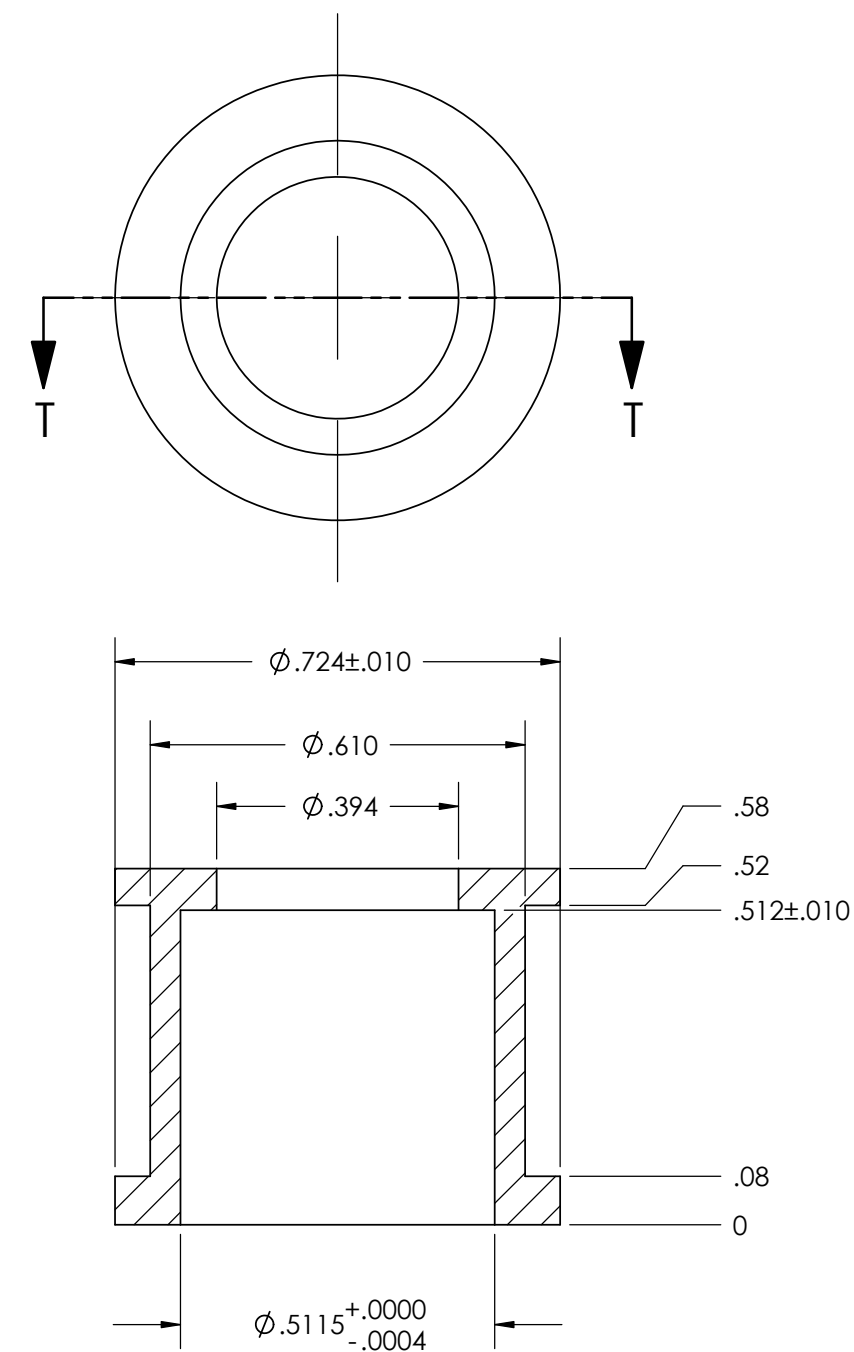


ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
11	1002357-011	Hall flag for carousel	17-4 Stainless Steel	1
12	1002357-012	tensioner stop for carousel	6061-T6 Aluminum	1
BILL OF MATERIALS			last updated on: Thursday, August 04, 2005 10:21:11 AM	
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: 1 PLACE DIM $\pm .016$ 2 PLACE DIM $\pm .01$ 3 PLACE DIM $\pm .005$ ANGLES $\pm .1^\circ$ 1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADII .010 TO .020 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH, MAX .010 INCHES FOR SINGLE SURFACE. 7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED	APPROVALS _____ DATE _____ ENGINEER Jason Feldman 831-775-1837 CHECKED _____ PROJECT NUMBER 701312.00 PROJECT ESP 2G CAD FILE: X:\701312 ESP 2G\SolidWorks files\internal structure (1002209)	
Inspector			Monterey Bay Aquarium Research Institute 7700 Sandholdt Road Moss Landing, CA 95039 	
Shop Foreman			CAROUSEL (prototype) SIZE C DWG. NO. 1002357 REV. A	
Engineer				
NEXT ASSY Description	NEXT ASSY Number			
DO NOT SCALE DRAWING				

1002357-013
CAROSUSEL HALL MOUNT

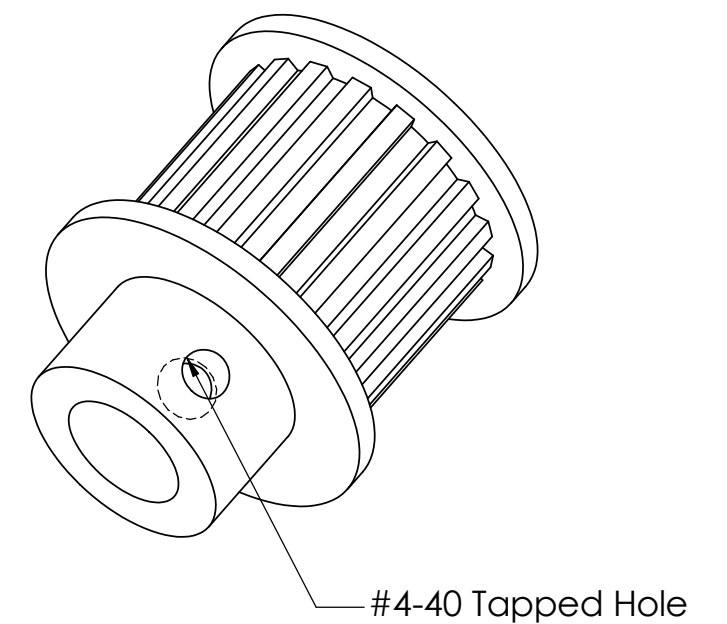
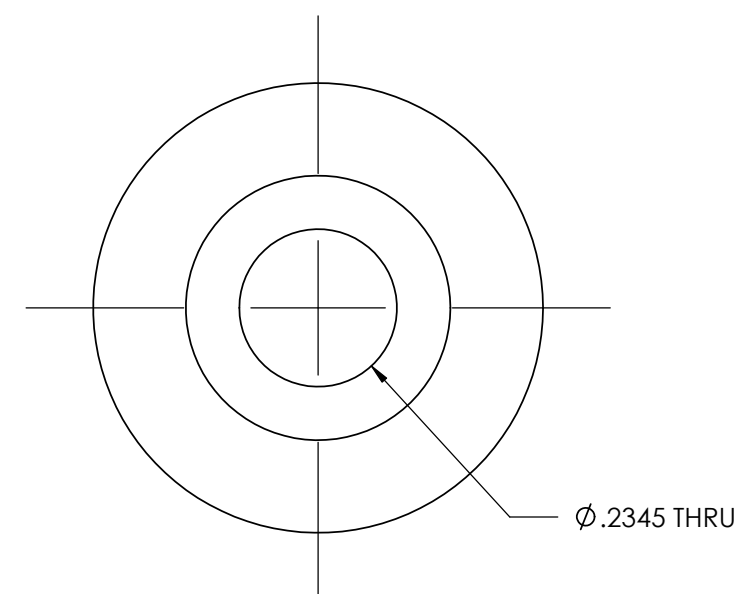


1002357-014
CAROUSLE IDLER



SECTION T-T

1002357-015
(modification to BRECOFLEX)



ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
13	1002357-013	Hall Sensor mount for carousel	6061-T6 Aluminum	1
14	1002357-014	Idler pulley for carousel	6061-T6 Aluminum	2
15	1002357-015			1

				last updated on: Thursday, August 04, 2005 10:21:11 AM	
BILL OF MATERIALS					
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS DATE ENGINEER Jason Feldman 831-775-1837 CHECKED PROJECT NUMBER 701312.00 PROJECT ESP 2G CAD FILE: X:\701312 ESP 2G\SolidWorks files\Internal structure (1002209)	
Inspector		1 PLACE DIM ±.1/16	2 PLACE DIM ±.01	3 PLACE DIM ±.005	Monterey Bay Aquarium Research Institute  7700 Sandholdt Road Moss Landing, CA 95039 CAROUSEL (prototype)
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING 3. REMOVE BURRS & SHARP EDGES .010 MAX 4. MACHINED FILLET RADI .010 TO .020 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .001 PER INCH. MAX .010 INCHES FOR SINGLE SURFACE.			SIZE C DWG. NO. 1002357 REV A
Engineer		7. SURFACE FINISH TO BE 63 MICRON UNLESS OTHERWISE SPECIFIED			
NEXT ASSY Description	NEXT ASSY Number	DO NOT SCALE DRAWING			