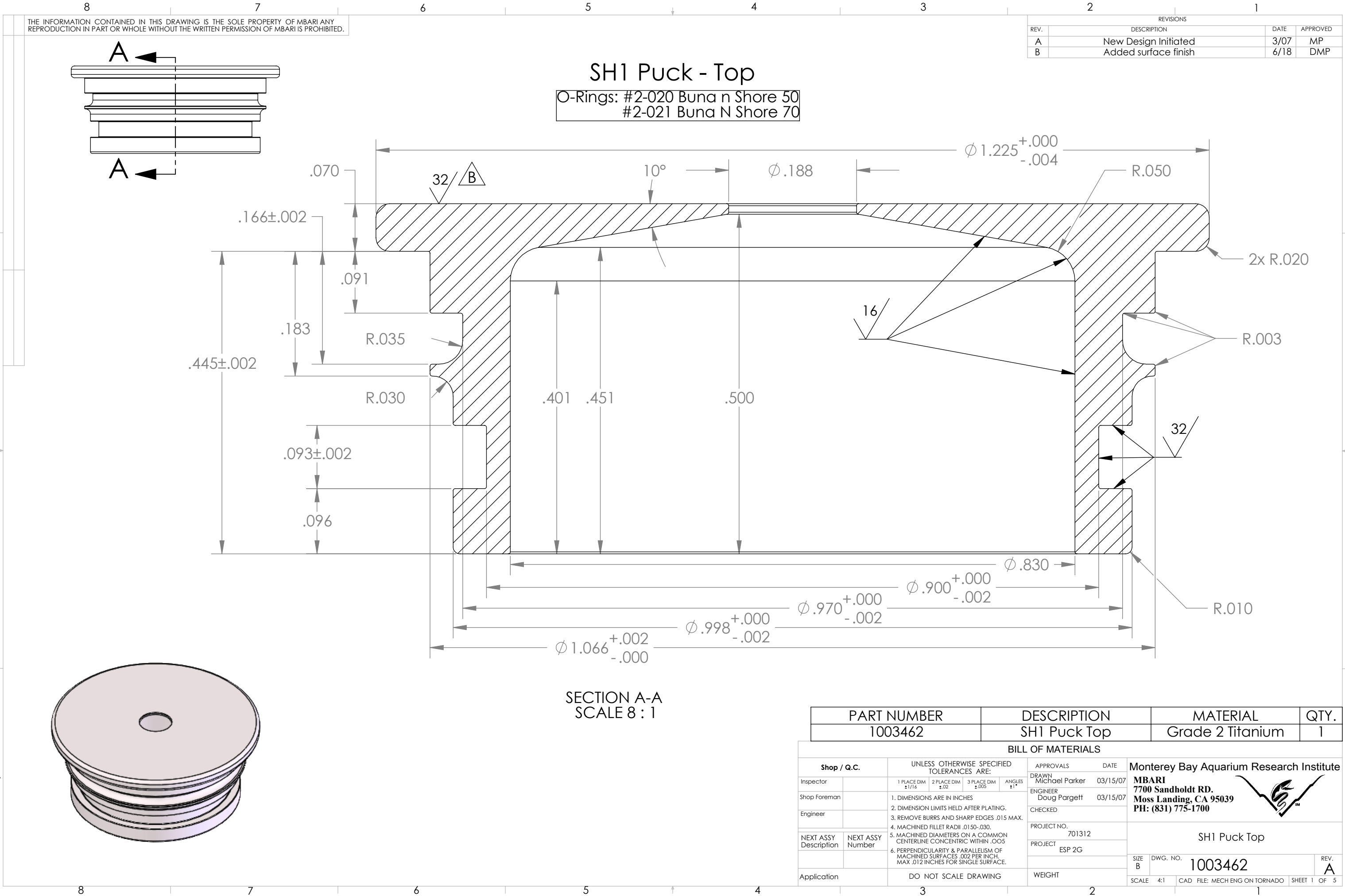




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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	New Design Initiated	3/07	MP
B	Added surface finish	6/18	DMP

SH1 Puck - Top

O-Rings: #2-020 Buna n Shore 50
#2-021 Buna N Shore 70

SECTION A-A
SCALE 8 : 1

PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1003462	SH1 Puck Top	Grade 2 Titanium	1

BILL OF MATERIALS			
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	APPROVALS DATE
Inspector		1 PLACE DIM ±1/16	DRAWN Michael Parker 03/15/07
Shop Foreman		2 PLACE DIM ±.02	ENGINEER Doug Pargett 03/15/07
Engineer		3 PLACE DIM ±.005	CHECKED
NEXT ASSY Description	NEXT ASSY Number	ANGLES ±1°	PROJECT NO. 701312
		1. DIMENSIONS ARE IN INCHES	PROJECT ESP 2G
		2. DIMENSION LIMITS HELD AFTER PLATING.	
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.	
		4. MACHINED FILLET RADII .0150-.030.	
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.	
Application		DO NOT SCALE DRAWING	WEIGHT

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SH1 Puck Top

SIZE	DWG. NO.	REV.
B	1003462	A
SCALE	4:1	CAD FILE: MECH ENG ON TORNADO
SHEET	1	OF 5

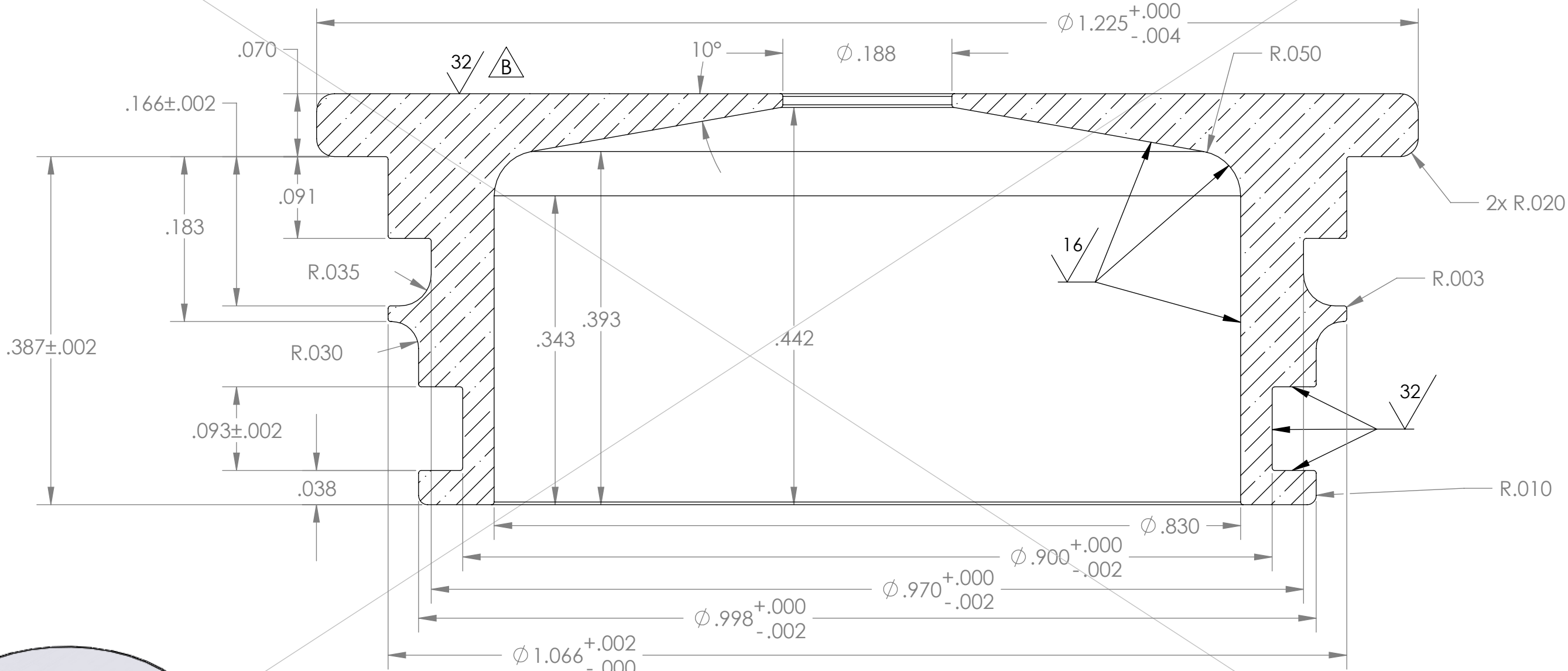
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	New Design Initiated	3/07	MP

SH1 High Volume Puck - Top

O-Rings: #2-020 Buna N Shore 50
#2-021 Buna N Shore 70

OBSOLETE



SECTION B-B
SCALE 8 : 1

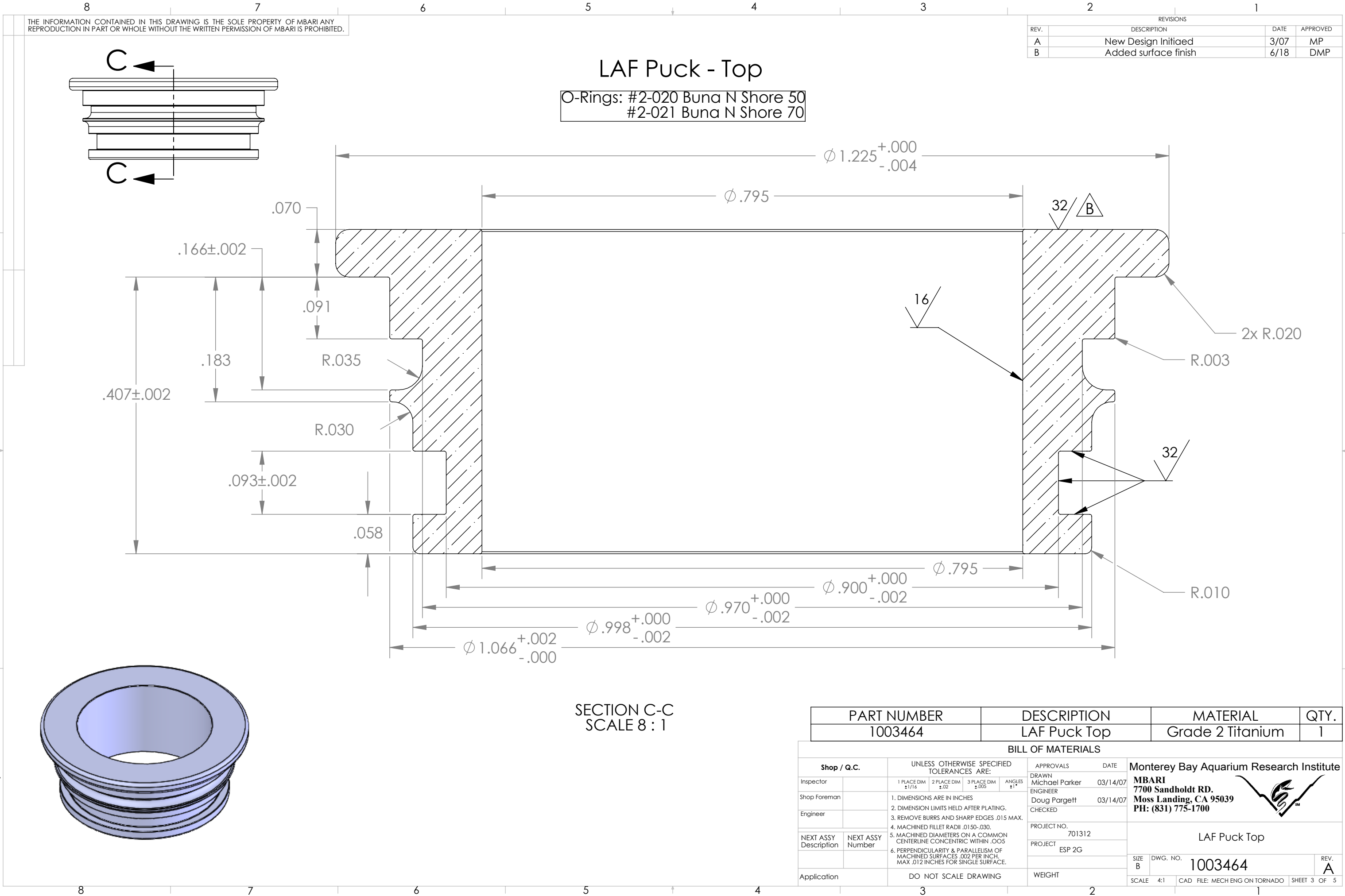
PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1003463	SH1 High Volume Top	Grade 2 Titanium	1

BILL OF MATERIALS			
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	APPROVALS
Inspector		1 PLACE DIM $\pm 1/16$	DRAWN Michael Parker 03/14/07
Shop Foreman		2 PLACE DIM $\pm .02$	ENGINEER Doug Pargett 03/14/07
Engineer		3 PLACE DIM $\pm .005$	CHECKED
NEXT ASSY Description	NEXT ASSY Number	ANGLES $\pm 1^\circ$	PROJECT NO. 701312
		1. DIMENSIONS ARE IN INCHES	PROJECT ESP 2G
		2. DIMENSION LIMITS HELD AFTER PLATING.	
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.	
		4. MACHINED FILLET RADII .0150-.030.	
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005	
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.	
Application		DO NOT SCALE DRAWING	WEIGHT

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SH1 High Volume Puck Top

SIZE	DWG. NO.	REV.
B	1003463	A
SCALE	4:1	CAD FILE: MECH ENG ON TORNADO
SHEET	2	OF 5



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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	New Design Initiaed	3/07	MP
B	Added surface finish	6/18	DMP

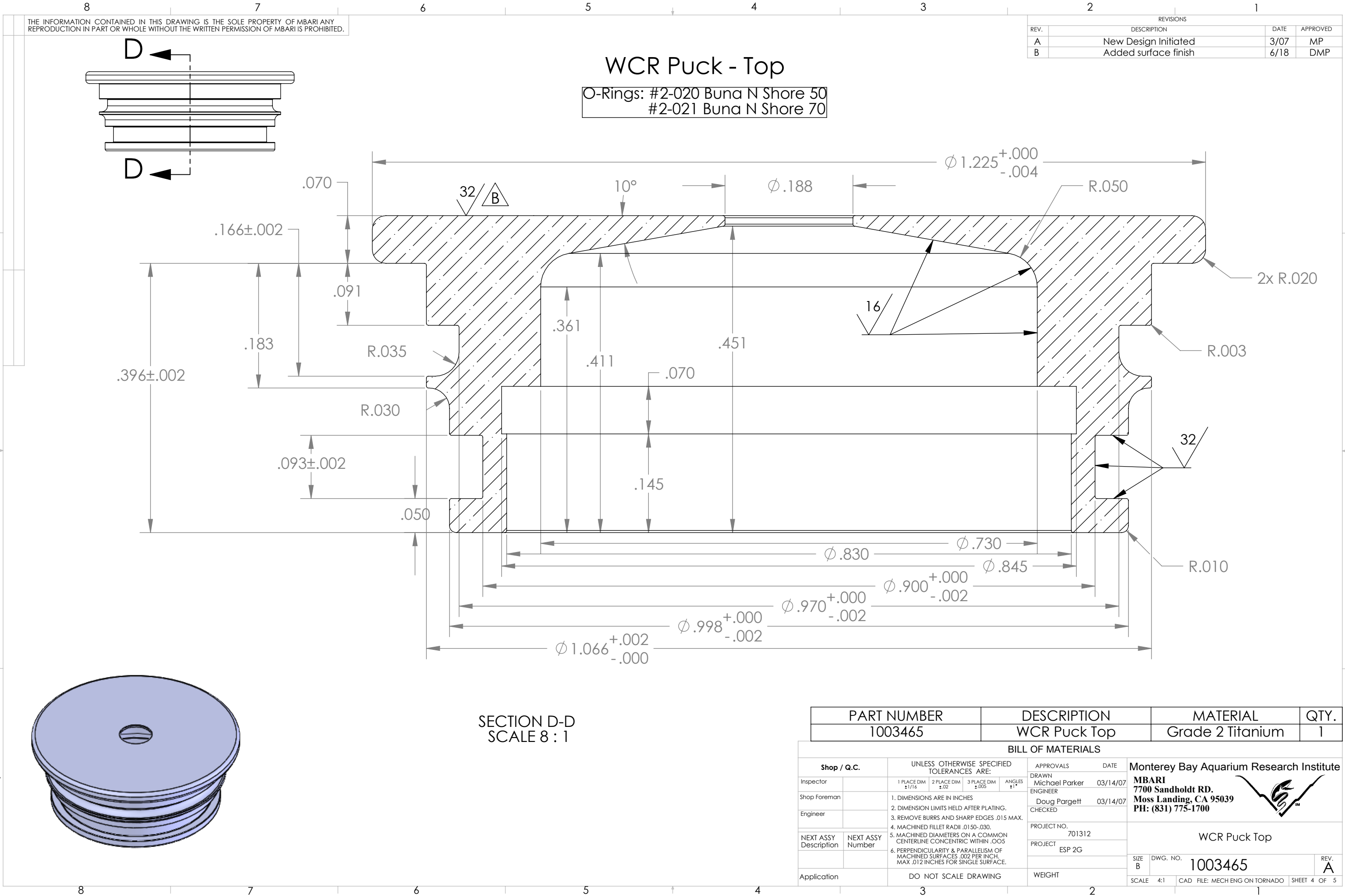
PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1003464	LAF Puck Top	Grade 2 Titanium	1

BILL OF MATERIALS			
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	APPROVALS
Inspector		1 PLACE DIM $\pm 1/16$	2 PLACE DIM $\pm .02$
Shop Foreman		3 PLACE DIM $\pm .005$	ANGLES $\pm 1^\circ$
Engineer		1. DIMENSIONS ARE IN INCHES	2. DIMENSION LIMITS HELD AFTER PLATING.
NEXT ASSY Description	NEXT ASSY Number	3. REMOVE BURRS AND SHARP EDGES .015 MAX.	4. MACHINED FILLET RADII .0150-.030.
		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.
Application		DO NOT SCALE DRAWING	WEIGHT
		DATE	DATE
		DRAWN Michael Parker	03/14/07
		ENGINEER Doug Pargett	03/14/07
		CHECKED	
		PROJECT NO. 701312	
		PROJECT ESP 2G	
		SIZE B	DWG. NO. 1003464
		SCALE 4:1	CAD FILE: MECH ENG ON TORNADO
		SHEET 3 OF 5	REV. A

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LAF Puck Top



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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	New Design Initiated	3/07	MP
B	Added surface finish	6/18	DMP

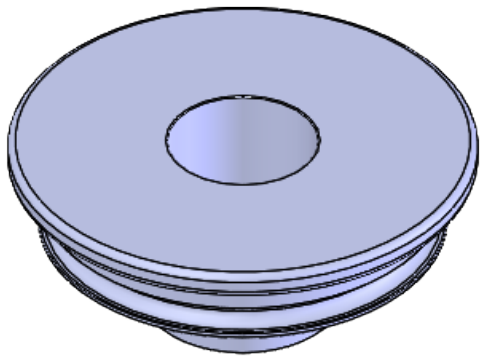
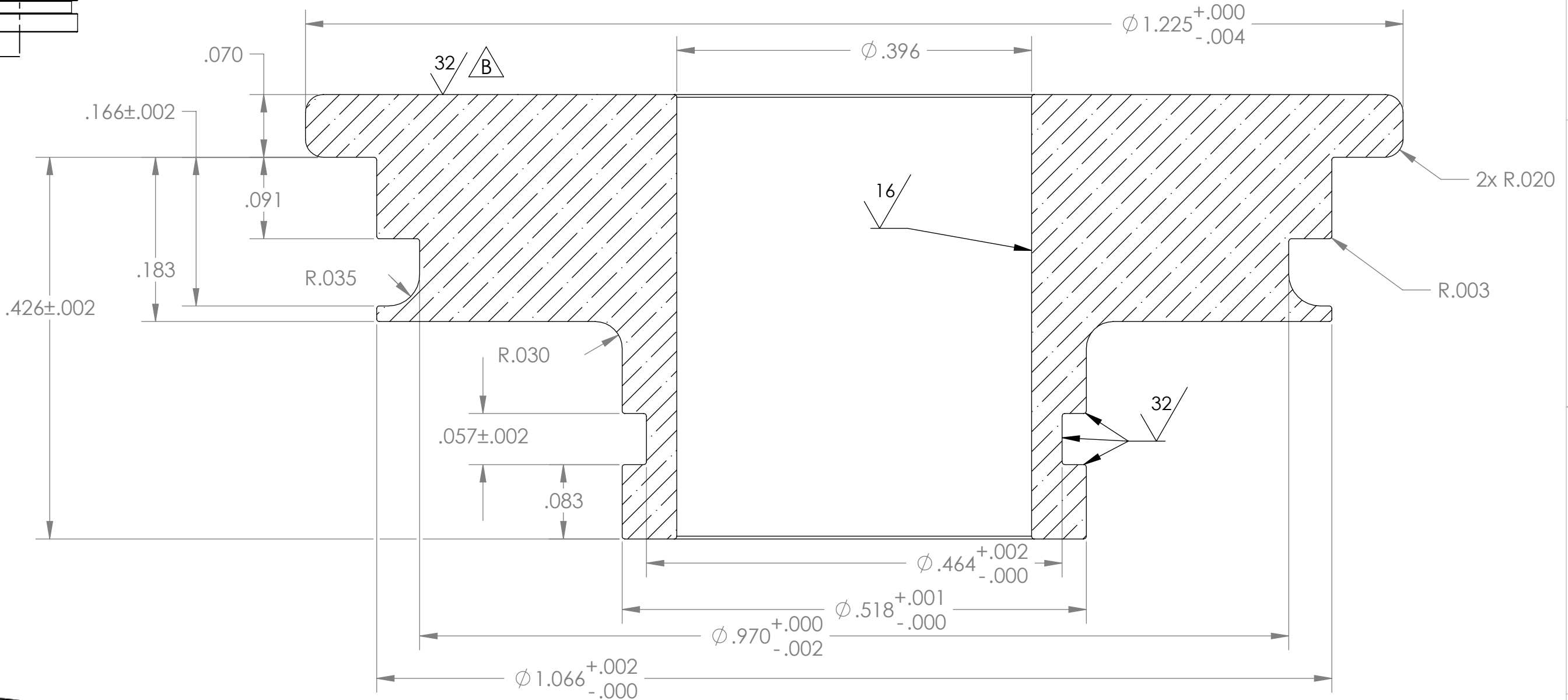
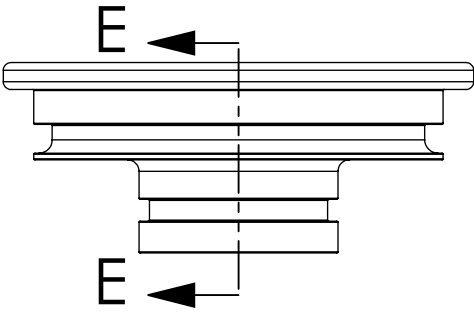
WCR Puck - Top

O-Rings: #2-020 Buna N Shore 50
#2-021 Buna N Shore 70

PART NUMBER		DESCRIPTION		MATERIAL		QTY.	
1003465		WCR Puck Top		Grade 2 Titanium		1	
BILL OF MATERIALS							
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS	DATE	Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 	
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°		DRAWN Michael Parker 03/14/07 ENGINEER Doug Pargett 03/14/07 CHECKED
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030. 5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005 6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.					PROJECT NO. 701312
Engineer							PROJECT ESP 2G
NEXT ASSY Description	NEXT ASSY Number						SIZE B DWG. NO. 1003465
Application		DO NOT SCALE DRAWING		WEIGHT		REV. A	
				SCALE 4:1 CAD FILE: MECH ENG ON TORNADO SHEET 4 OF 5			

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	New Design Initiated	3/07	MP
B	Added surface finish	6/18	DMP

O-Rings: Apple .453 ID x .039 W Shore 50
#2-021 Buna-N Shore 70



SECTION E-E
SCALE 8 : 1

PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1003466	SAF Puck Top	Grade 2 Titanium	1

BILL OF MATERIALS											
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS		DATE		Monterey Bay Aquarium Research Institute MBARI 7700 Sandholdt RD. Moss Landing, CA 95039 PH: (831) 775-1700 		
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°	DRAWN Michael Parker	03/14/07				
Shop Foreman		1. DIMENSIONS ARE IN INCHES 2. DIMENSION LIMITS HELD AFTER PLATING. 3. REMOVE BURRS AND SHARP EDGES .015 MAX. 4. MACHINED FILLET RADII .0150-.030.			ENGINEER Doug Pargett	03/14/07	CHECKED		SAF Puck Top		
Engineer		5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005					PROJECT NO. 701312				
NEXT ASSY Description	NEXT ASSY Number	6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH MAX .012 INCHES FOR SINGLE SURFACE.			PROJECT ESP 2G						
Application		DO NOT SCALE DRAWING			WEIGHT		SIZE B	DWG. NO. 1003466	REV. A		
							SCALE 4:1	CAD FILE: MECH ENG ON TORNADO	SHEET 5	OF 5	