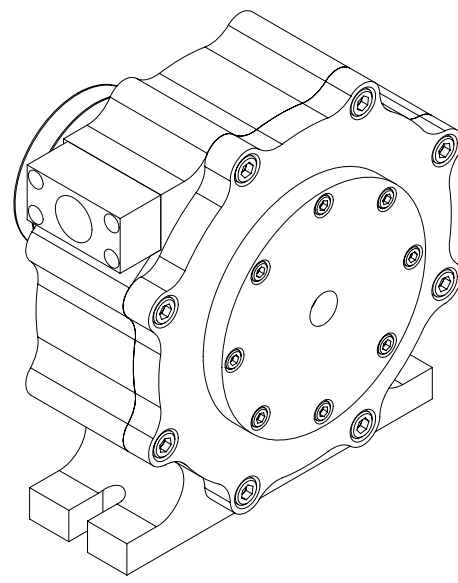
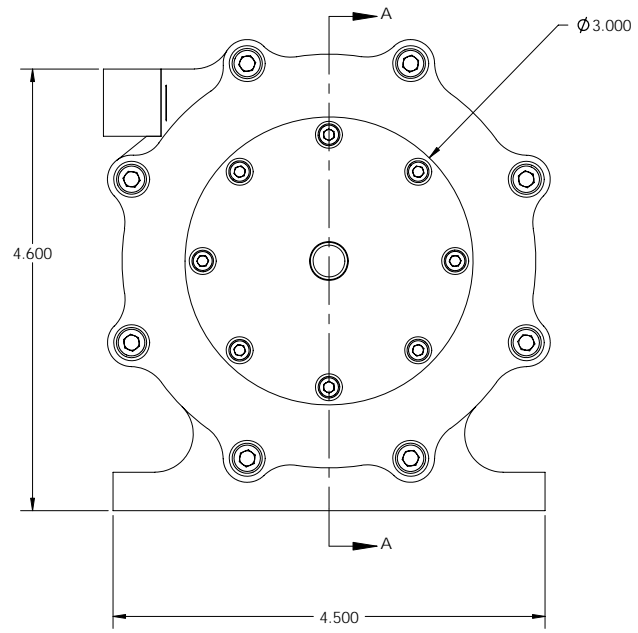
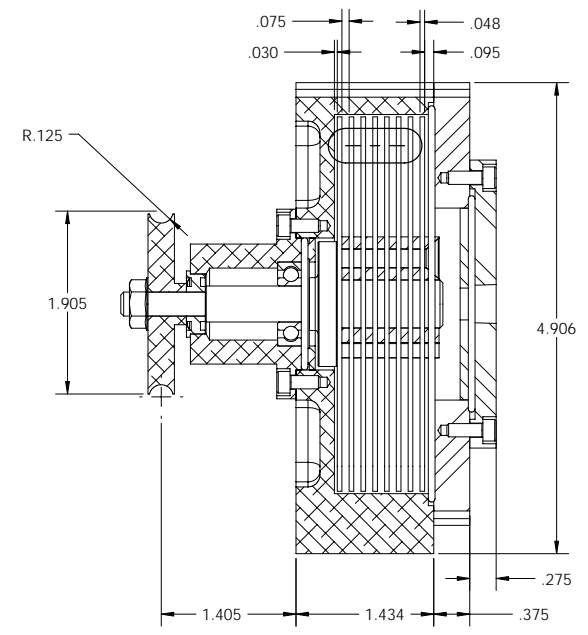
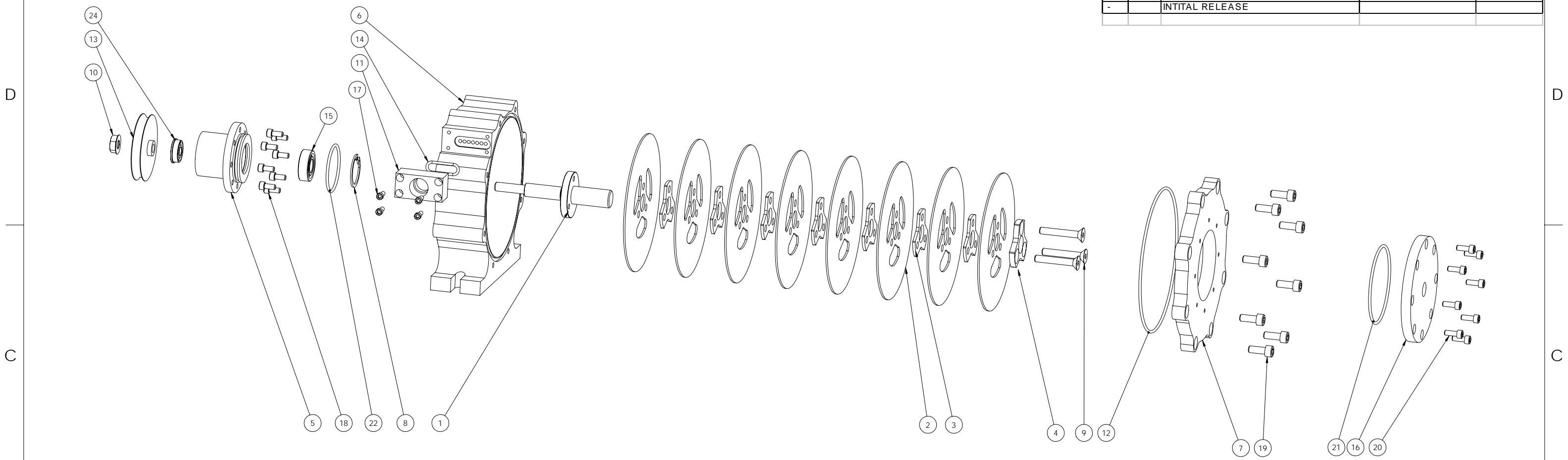


REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



ITEM NO.	QTY	DESCRIPTION
1	1	SHAFT, ROTOR
2	8	DISC, TURBINE
3	7	SPACER, TURBINE DISC
4	1	CLAMP PLATE, ROTOR
5	1	HOUSING, BEARING
6	1	HOUSING, TURBINE
7	1	COVER, HOUSING
8	1	RETAINING RING, BEARING
9	3	SHCS 10-24 X 1.25
10	1	LOCKNUT .250-20
11	1	BLOCK, INLET
12	1	ORING, COVER AS568A-045
13	1	PULLEY, OUTPUT SHAFT
14	1	ORING, INLET AS568A-016
15	1	BALL BEARING .8750 OD X .3750 ID X .281 ABEC 7
16	1	INLET PLATE, PUMP
17	4	SHCS .112-40 X .31
18	8	SHCS .138 X .31
19	8	SHCS 10-24 X .50
20	8	SHCS .138 X .38
21	1	ORING, COVER AS568A-045
22	1	ORING, BEARING HSG AS568A-026
23	1	SPACER, BEARING
24	1	.6250 X 2500 BEARING, FLANGED ABEC7

ALL DIMENSIONS ARE IN INCHES - INTERPRET DRAWING PER ASME Y14.5 -1994

TOLERANCES UNLESS OTHERWISE SPECIFIED:
 X.X ± .03 $\angle \pm .5^\circ$
 X.XX ± .01
 X.XXX ± .005 125/

REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX

APPROVED	DATE	 TESLA TURBINE ASSY
PREP BY D. ANDERSON	2-20-08	
CHECKED		
RESP ENG		
MFG ENG		
QUAL ENG		

SIZE	FSCM NO.	PART NO.	PART REV	DOC REV
D				01
SCALE	1:1	WT	3.0509	SHEET 1 OF 1

4

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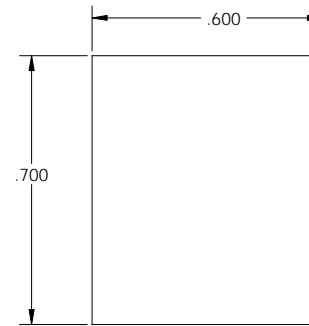
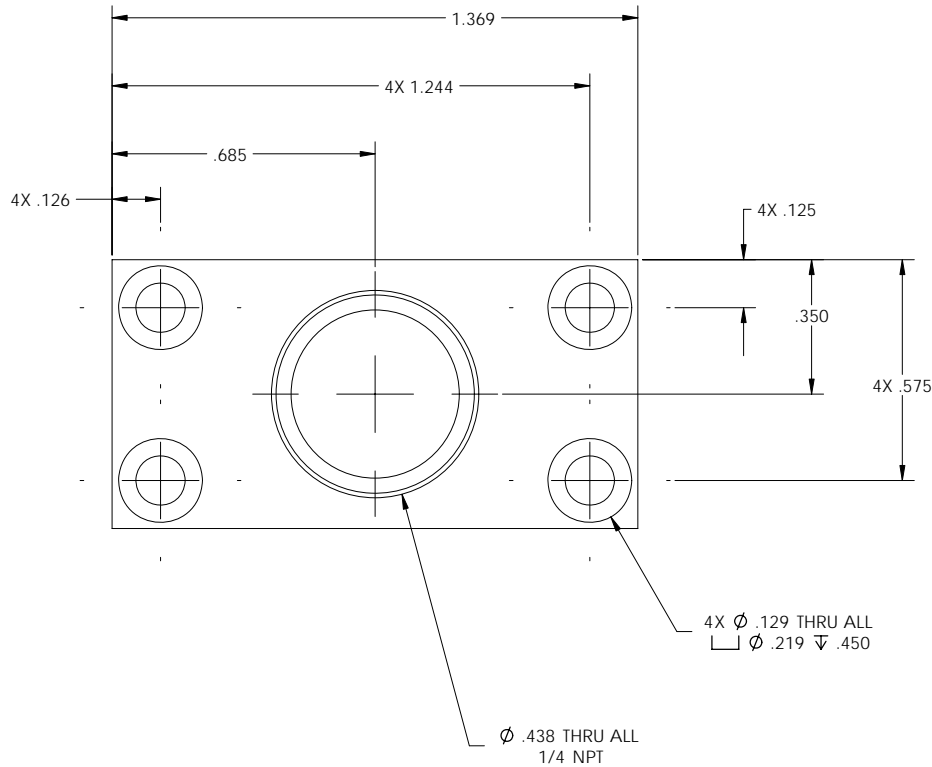
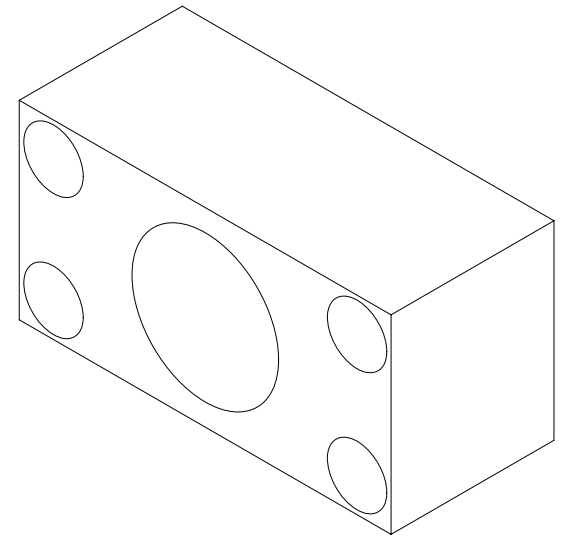
2

1

NOTES, UNLESS OTHERWISE SPECIFIED

- 1. UNSPECIFIED FILLET RADII .005-.010.
- 2. MATERIAL: AL BAR 6061-T651
- 3. THREADS PER ANSI B1.1.

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



ALL DIMENSIONS ARE IN INCHES- INTERPRET DRAWING PER ASME Y14.5 -1994

TOLERANCES UNLESS OTHERWISE SPECIFIED:
 X.X ± .03 ∠ ± .5°
 X.XX ± .01
 X.XXX ± .005 125/

REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX

APPROVED	DATE
PREP BY D. ANDERSON	
CHECKED	
RESP ENG D. ANDERSON	
MFG ENG	
QUAL ENG	

Franklin W. Olin College of Engineering

BLOCK, INLET

SIZE	FSCM NO.	PART NO.	PART REV	DOC REV
C				02
SCALE	4:1	WT	0.04	SHEET 1 OF 1

◆ = (CRITICAL DIMENSION)

4

3

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C

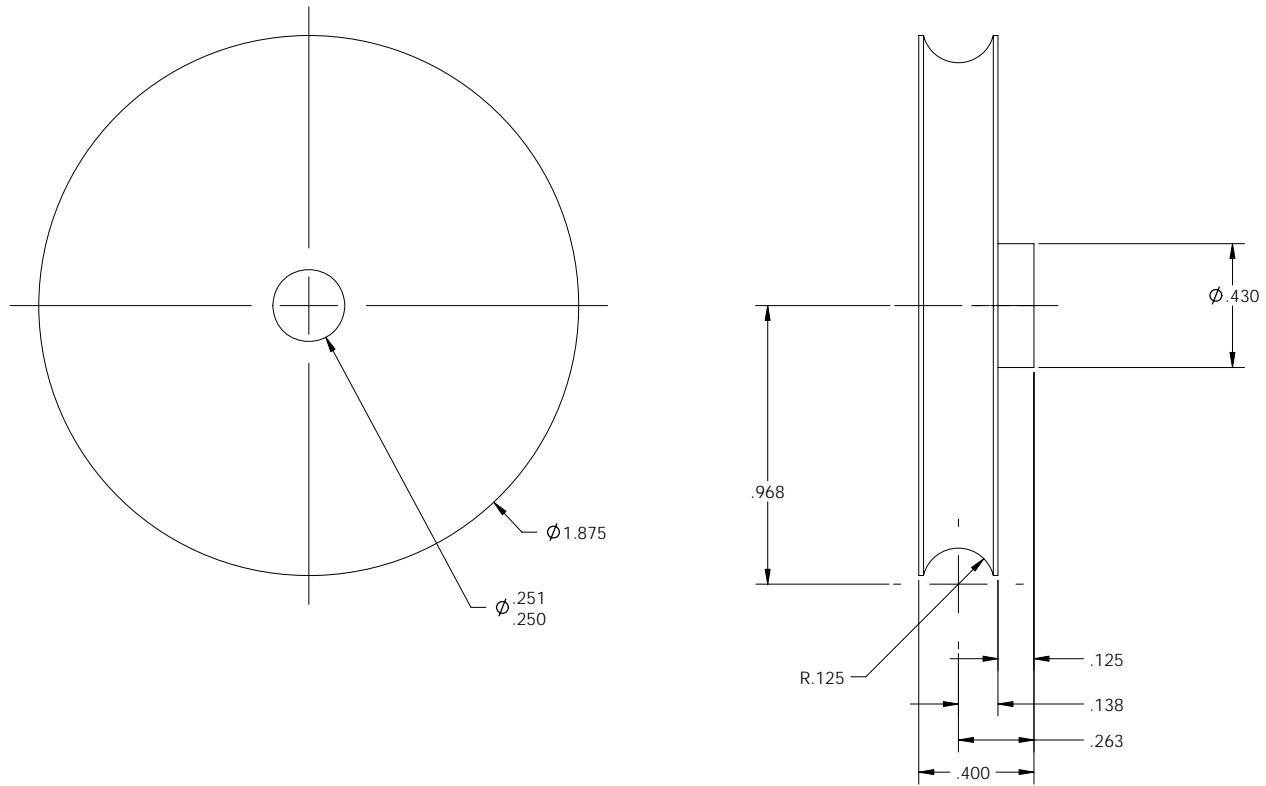
B

A

NOTES, UNLESS OTHERWISE SPECIFIED

1. UNSPECIFIED FILLET RADII .005-.010.
2. MATERIAL: AL BAR 6061-T651
3. THREADS PER ANSI B1.1.

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



ALL DIMENSIONS ARE IN INCHES- INTERPRET DRAWING PER ASME Y14.5 -1994

TOLERANCES UNLESS OTHERWISE SPECIFIED:
 X.X ± .03 ∠ ± .5°
 X.XX ± .01
 X.XXX ± .005 125/

REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX

APPROVED	DATE
PREP BY D. Anderson	
CHECKED	
RESP ENG	
MFG ENG	
QUAL ENG	

Franklin W. Olin
College of Engineering

PULLEY, OUTPUT SHAFT

SIZE C	FSCM NO.	PART NO.	PART REV	DOC REV 01
SCALE 3:1	WT	SHEET 1	OF 1	

◆ = (CRITICAL DIMENSION)

4

3

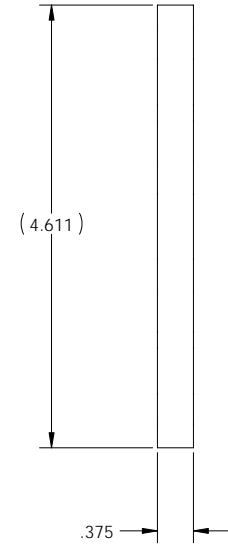
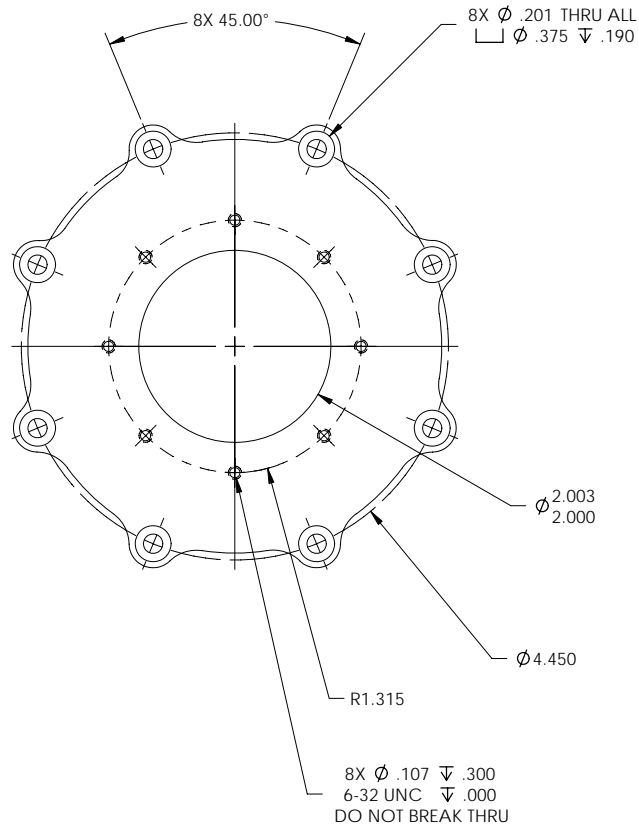
2

1

NOTES, UNLESS OTHERWISE SPECIFIED

- 1. UNSPECIFIED FILLET RADII .005-.010.
- 2. MATERIAL: CLEAR POLYCARBONATE

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



ALL DIMENSIONS ARE IN INCHES- INTERPRET DRAWING PER ASME Y14.5 -1994

TOLERANCES UNLESS OTHERWISE SPECIFIED:
 X.X \pm .03 \angle \pm .5°
 X.XX \pm .01
 X.XXX \pm .005 \surd 125/

REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX

APPROVED	DATE
PREP BY D. ANDERSON	3-28-08
CHECKED	
RESP ENG	
MFG ENG	
QUAL ENG	

Franklin W. Olin
 College of Engineering

COVER, HOUSING

SIZE	FSCM NO.	PART NO.	PART REV	DOC REV
C				01
SCALE	1:1	WT	SHEET	1 OF 1

◆ = (CRITICAL DIMENSION)

4

3

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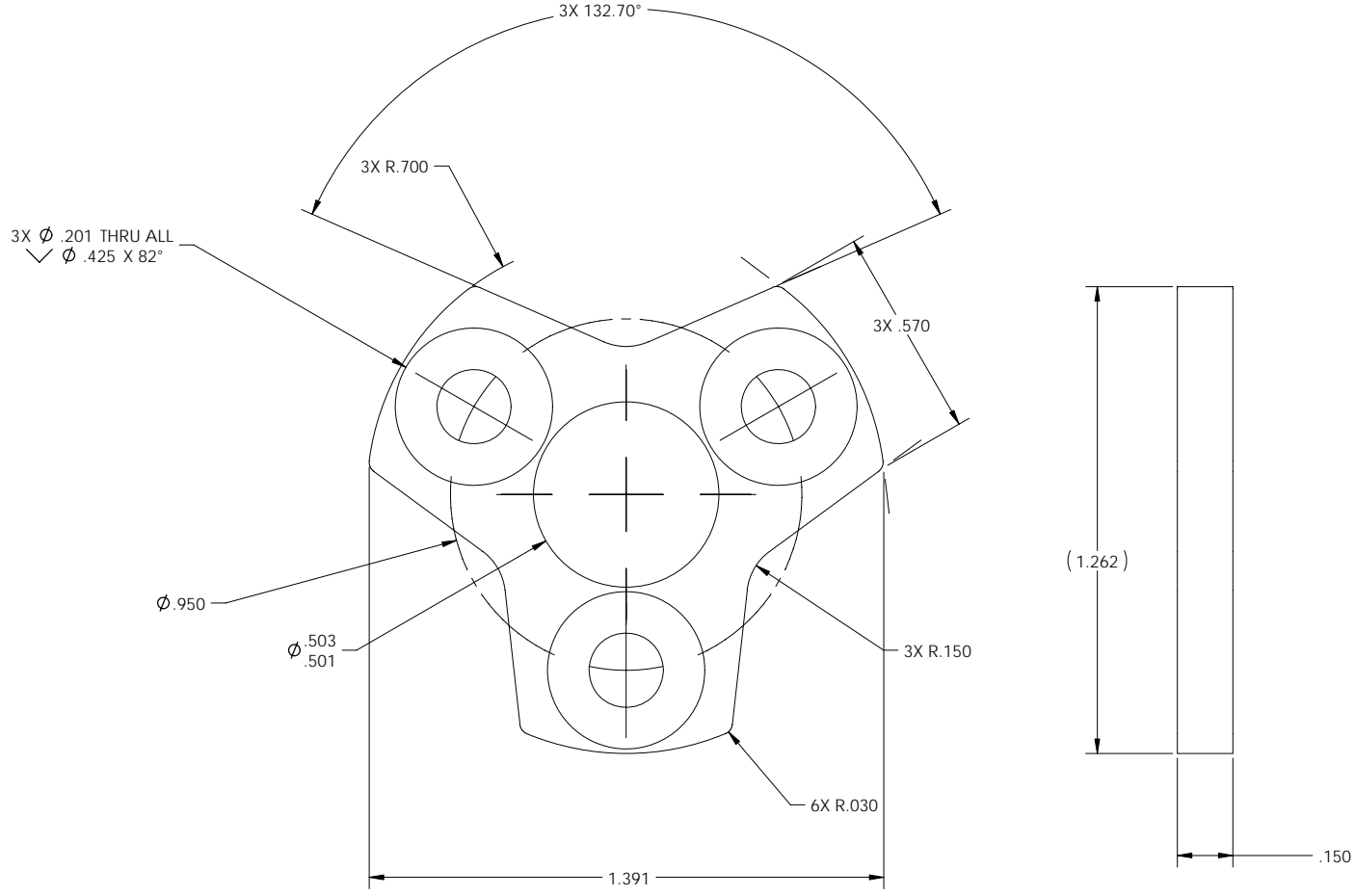
A

A

NOTES, UNLESS OTHERWISE SPECIFIED

1. UNSPECIFIED FILLET RADII .005-.010.
2. MATERIAL: AL BAR 6061-T651
3. THREADS PER ANSI B1.1.

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



ALL DIMENSIONS ARE IN INCHES- INTERPRET DRAWING PER ASME Y14.5 -1994

TOLERANCES UNLESS OTHERWISE SPECIFIED:
 X.X $\pm .03$ $\angle \pm .5^\circ$
 X.XX $\pm .01$
 X.XXX $\pm .005$ $\sqrt{125}$

REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX

APPROVED	DATE
PREP BY	
CHECKED	
RESP ENG	
MFG ENG	
QUAL ENG	

Franklin W. Olin College of Engineering

CLAMP PLATE, ROTOR

SIZE	FSCM NO.	PART NO.	PART REV	DOC REV
C				01
SCALE	4:1	WT	SHEET 1	OF 1

◆ = (CRITICAL DIMENSION)

4

3

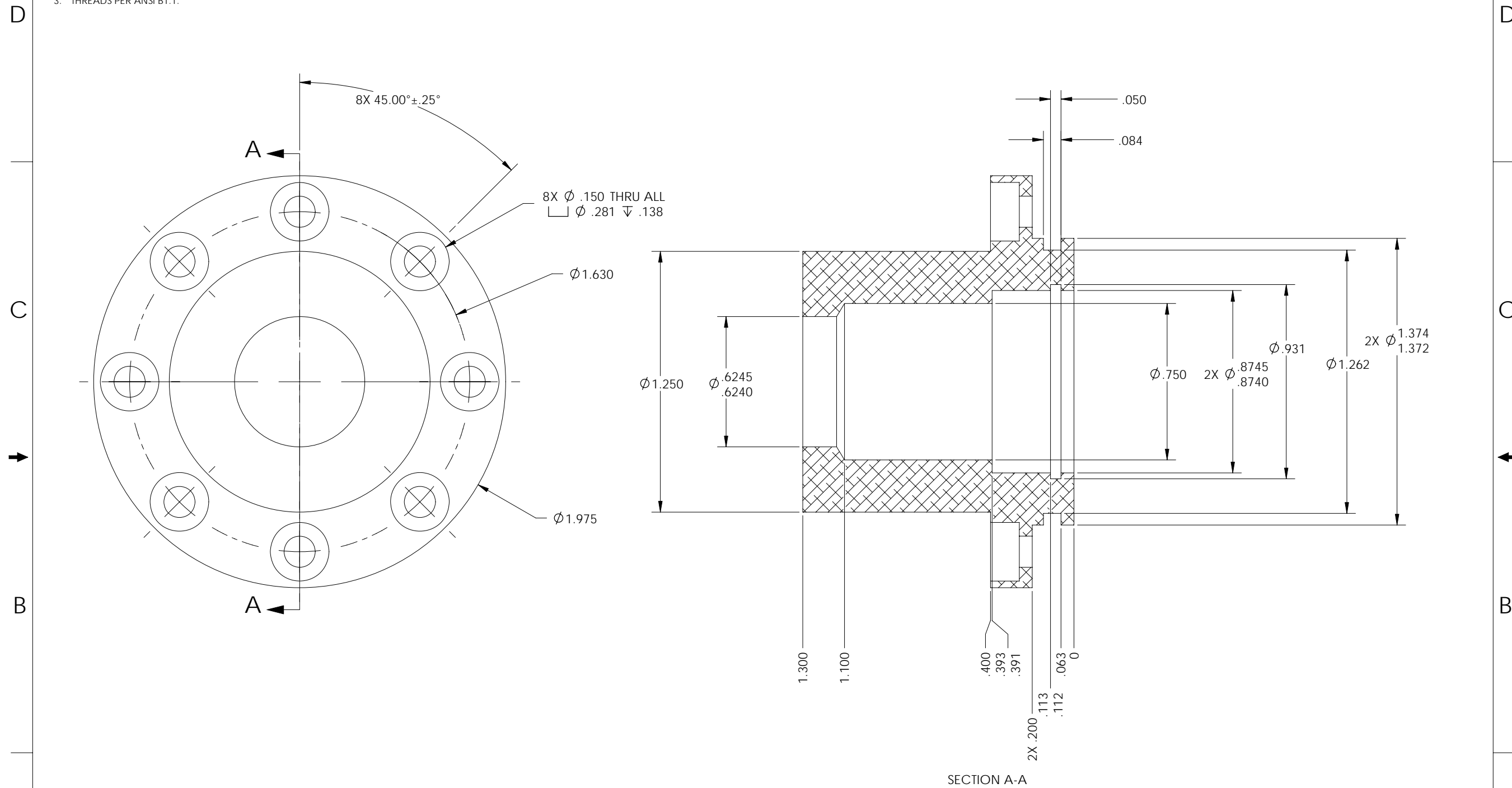
2

1

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		

NOTES, UNLESS OTHERWISE SPECIFIED

- 1. UNSPECIFIED FILLET RADII .005-.010.
- 2. MATERIAL: AL BAR 6061-T651
- 3. THREADS PER ANSI B1.1.



ALL DIMENSIONS ARE IN INCHES- INTERPRET DRAWING PER ASME Y14.5 -1994	APPROVED	DATE
TOLERANCES UNLESS OTHERWISE SPECIFIED: X.X ± .03 < ± .5° X.XX ± .01 X.XXX ± .005 125/	PREP BY D. ANDERSON	3-28-08
REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX	CHECKED	
	RESP ENG	
	MFG ENG	
	QUAL ENG	
	◆ = (CRITICAL DIMENSION)	

Franklin W. Olin
 College of Engineering

HOUSING, BEARING

SIZE C	FSCM NO.	PART NO.	PART REV	DOC REV 01
SCALE 3:1	WT	SHEET 1	OF 1	

4

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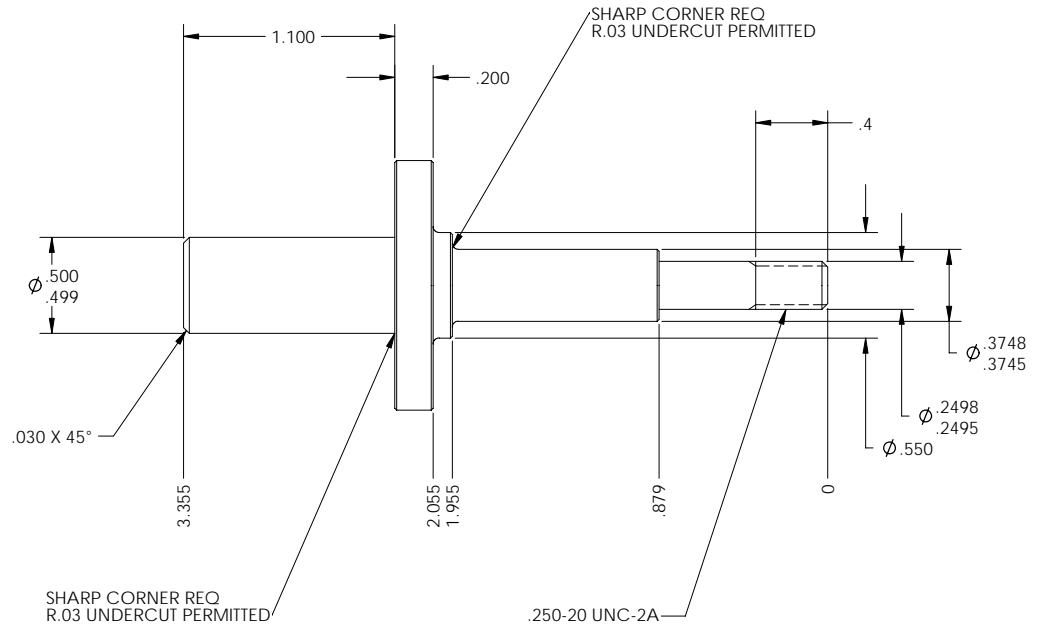
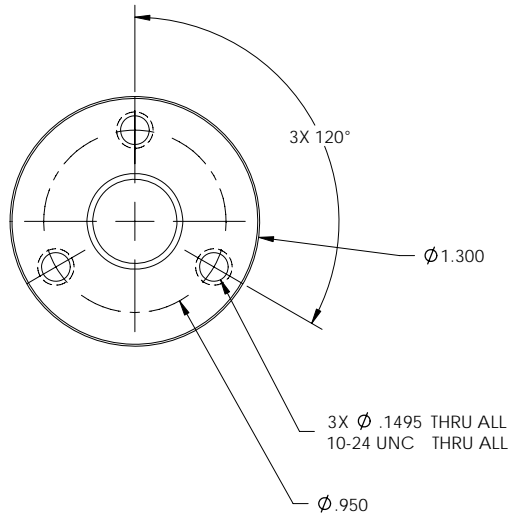
2

1

NOTES, UNLESS OTHERWISE SPECIFIED

- 1. UNSPECIFIED FILLET RADII .005-.010.
- 2. MATERIAL: 416SS RC 28 MIN.
- 3. THREADS PER ANSI B1.1.

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



ALL DIMENSIONS ARE IN INCHES- INTERPRET DRAWING PER ASME Y14.5 -1994

TOLERANCES UNLESS OTHERWISE SPECIFIED:

X.X ± .03 ∠ ± .5°

X.XX ± .01

X.XXX ± .005 125/

REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX

APPROVED	DATE
PREP BY D. ANDERSON	
CHECKED	
RESP ENG D. ANDERSON	
MFG ENG	
QUAL ENG	

Franklin W. Olin
College of Engineering

SHAFT, ROTOR

SIZE C	FSCM NO.	PART NO.	PART REV 01	DOC REV
SCALE 2:1	WT 0.19	SHEET 1	OF 1	

◆ = (CRITICAL DIMENSION)

4

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1

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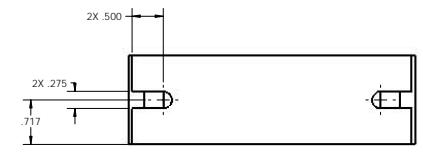
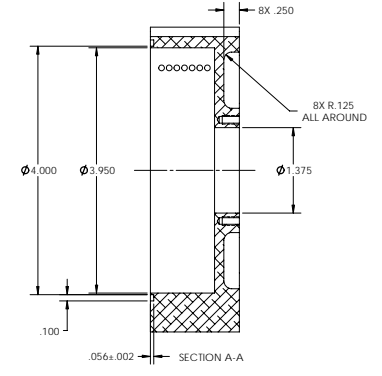
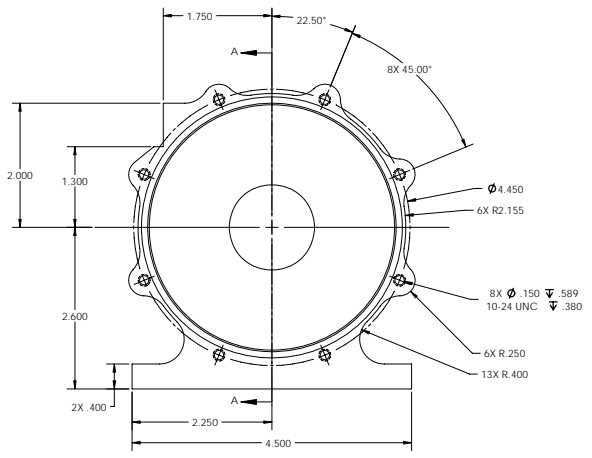
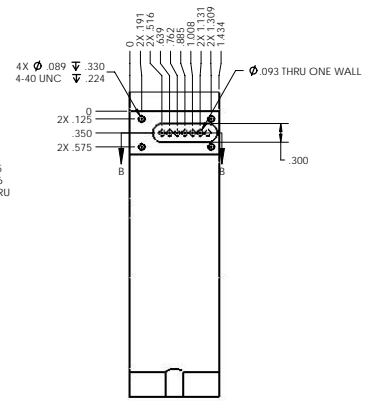
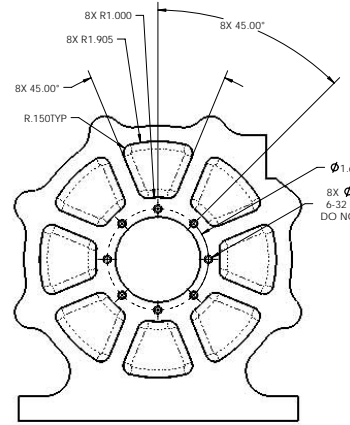
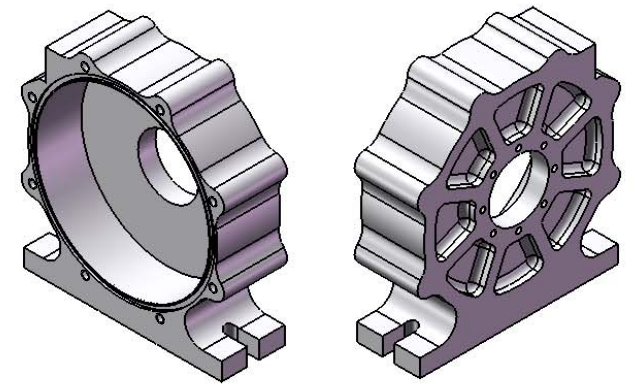
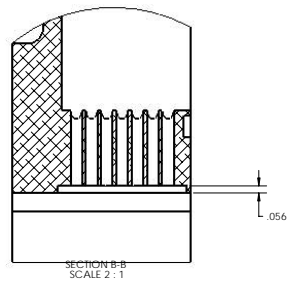
A

A

8 7 6 5 4 3 2 1

NOTES, UNLESS OTHERWISE SPECIFIED:
 1. UNSPECIFIED FILLET RADIUS .005-.010.
 2. MATERIAL: AL 6061-T651
 3. THREADS PER ANSI B1.1.

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



D
C
B
A

D
C
B
A

8 7 6 5 4 3 2 1

ALL DIMENSIONS ARE IN INCHES - INTERPRET DRAWING PER ASME Y14.5-1994 TOLERANCES UNLESS OTHERWISE SPECIFIED: X.X ±.03 $\angle \pm .5^\circ$ X.XX ±.01 X.XXX ±.005 125 REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX	APPROVED	DATE	Franklin W. Olin College of Engineering	
	PREP BY: D. ANDERSON	3-28-08	HOUSING, TURBINE	
	CHECKED:			
	RESP ENG: D. ANDERSON			
	MFG ENG:			
	QUAL ENG:			
	SCALE: 1:1	SIZE: D	PART NO:	PART REV: 01
			WT:	SHEET 1 OF 1

4

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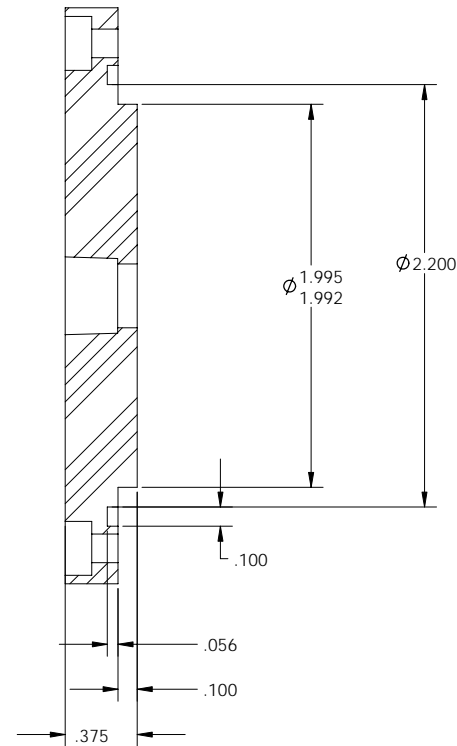
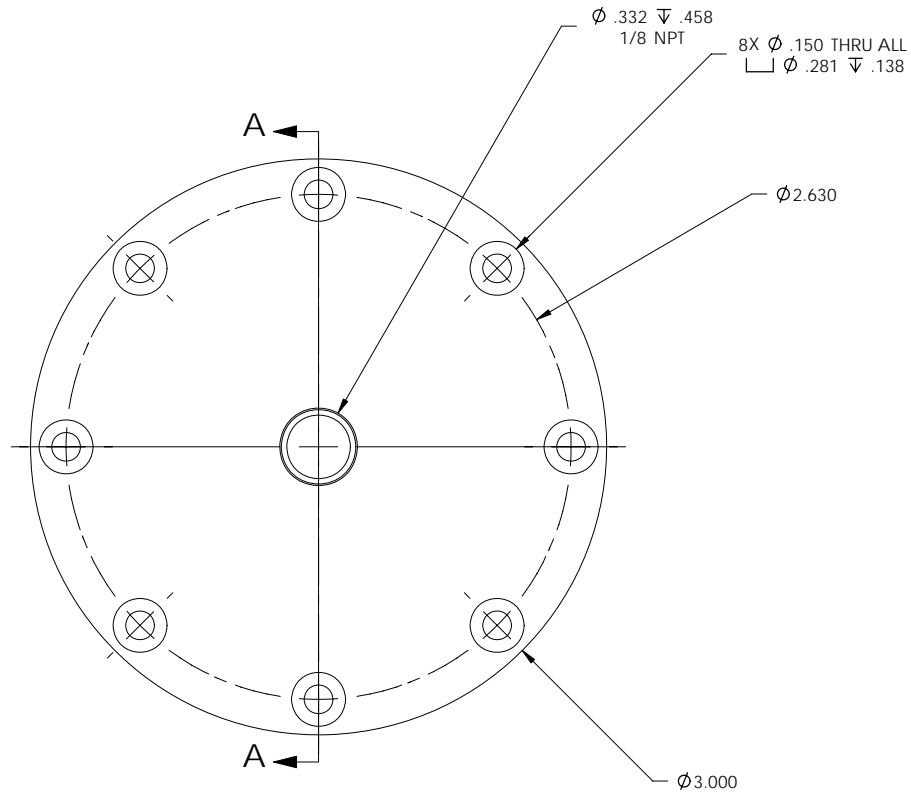
2

1

NOTES, UNLESS OTHERWISE SPECIFIED

- 1. UNSPECIFIED FILLET RADII .005-.010.
- 2. MATERIAL: LEXAN
- 3. THREADS PER ANSI B1.1.

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



SECTION A-A

ALL DIMENSIONS ARE IN INCHES- INTERPRET DRAWING PER ASME Y14.5 -1994

TOLERANCES UNLESS OTHERWISE SPECIFIED:

X.X $\pm .03$ $\angle \pm .5^\circ$

X.XX $\pm .01$

X.XXX $\pm .005$ $125/\sqrt{\quad}$

REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX

APPROVED	DATE
PREP BY D. ANDERSON	2-20-08
CHECKED	
RESP ENG D. ANDERSON	
MFG ENG	
QUAL ENG	



INLET PLATE, PUMP

SIZE	FSCM NO.	PART NO.	PART REV	DOC REV
C				01
SCALE	2:1	WT	0.09	SHEET 1 OF 1

◆ = (CRITICAL DIMENSION)

4

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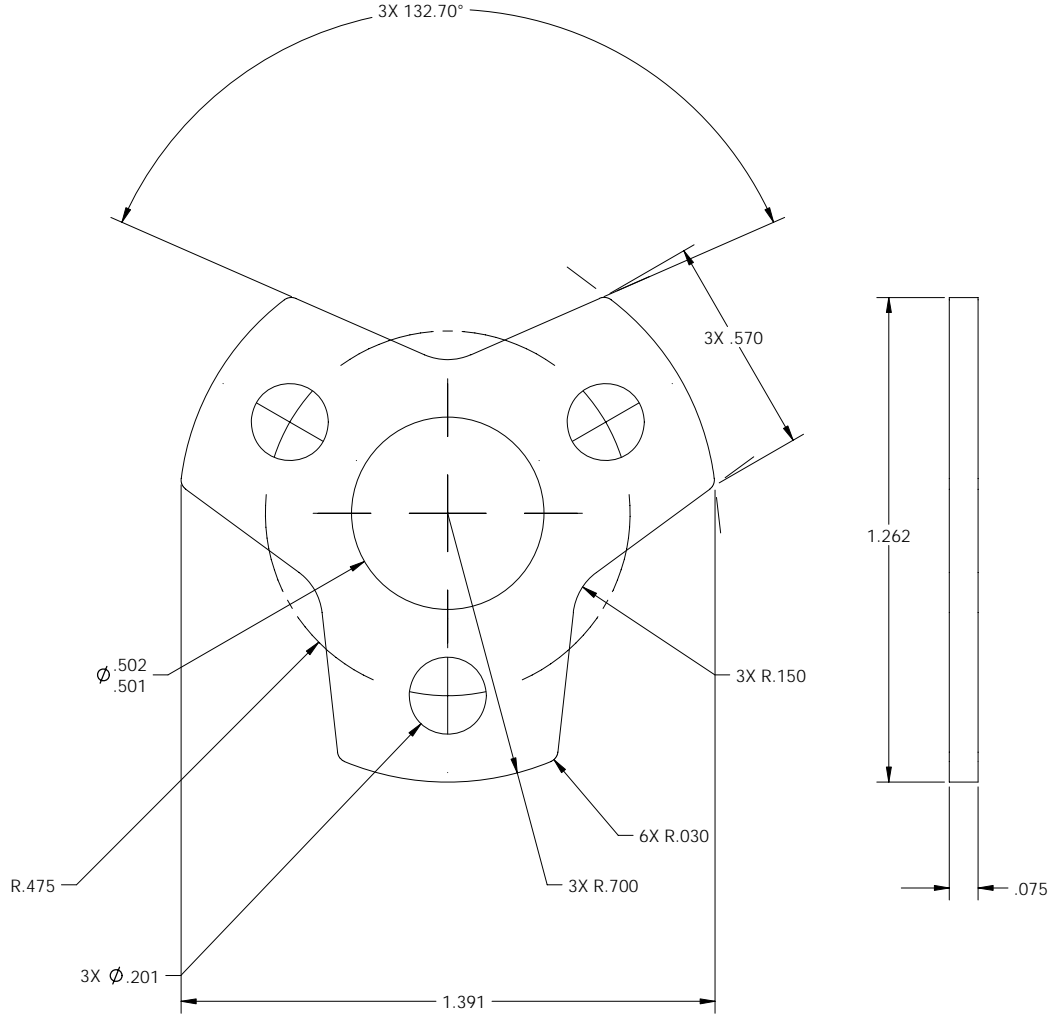
2

1

NOTES, UNLESS OTHERWISE SPECIFIED

- 1. UNSPECIFIED FILLET RADII .005-.010.
- 2. MATERIAL: AL BAR 6061-T651
- 3. THREADS PER ANSI B1.1.

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



ALL DIMENSIONS ARE IN INCHES- INTERPRET DRAWING PER ASME Y14.5 -1994

TOLERANCES UNLESS OTHERWISE SPECIFIED:

X.X $\pm .03$ $\angle \pm .5^\circ$

X.XX $\pm .01$

X.XXX $\pm .005$ $\sqrt{125}$

REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX

APPROVED	DATE
PREP BY D. ANDERSON	
CHECKED	
RESP ENG	
MFG ENG	
QUAL ENG	

Franklin W. Olin
College of Engineering

SPACER, TURBINE DISC

SIZE C	FSCM NO.	PART NO.	PART REV	DOC REV 01
SCALE 4:1	WT	SHEET 1	OF 1	

◆ = (CRITICAL DIMENSION)

4

3



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D

C

B

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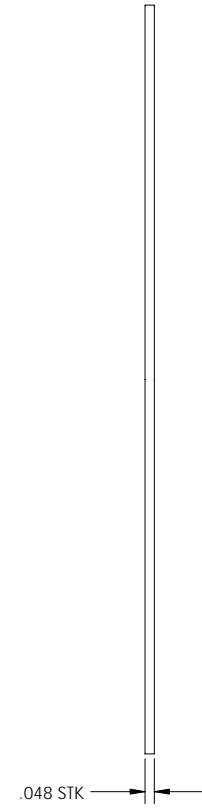
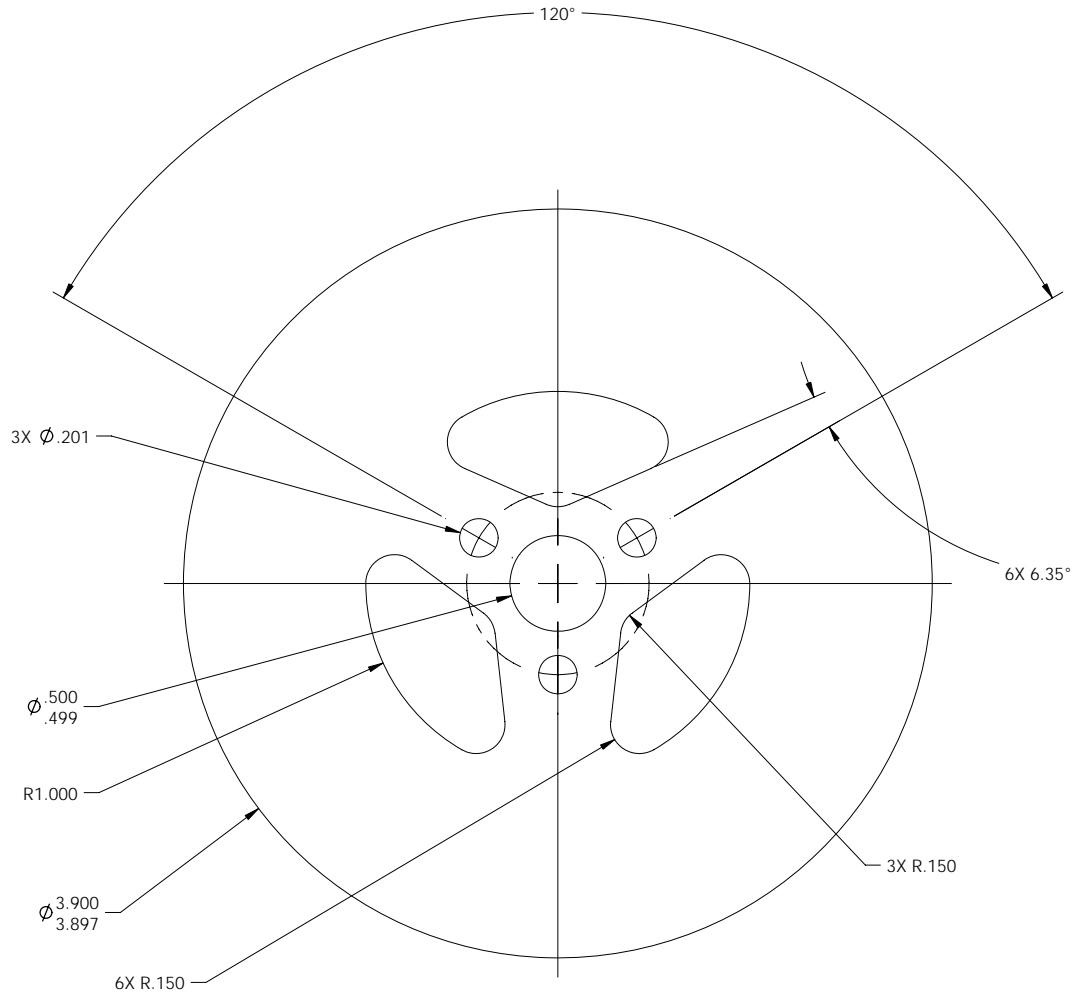
2

1

NOTES, UNLESS OTHERWISE SPECIFIED

- 1. UNSPECIFIED FILLET RADII .005-.010.
- 2. MATERIAL: 304SS POLISHED SHEET

REV	ZONE	DESCRIPTION	APPROVED	DATE
-		INITIAL RELEASE		



ALL DIMENSIONS ARE IN INCHES- INTERPRET DRAWING PER ASME Y14.5 -1994

TOLERANCES UNLESS OTHERWISE SPECIFIED:

X.X ± .03 ∠ ± .5°

X.XX ± .01

X.XXX ± .005 125/

REMOVE ALL BURRS AND SHARP EDGES .005 R OR CHAMFER MAX

APPROVED	DATE
PREP BY D. ANDERSON	
CHECKED	
RESP ENG D. ANDERSON	
MFG ENG	
QUAL ENG	

Franklin W. Olin
College of Engineering

DISC, TURBINE

SIZE C	FSCM NO.	PART NO.	PART REV	DOC REV 01
SCALE 2:1	WT 0.14	SHEET 1	OF 1	

◆ = (CRITICAL DIMENSION)

4

3

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2

1

D

D

C

C

B

B

A

A