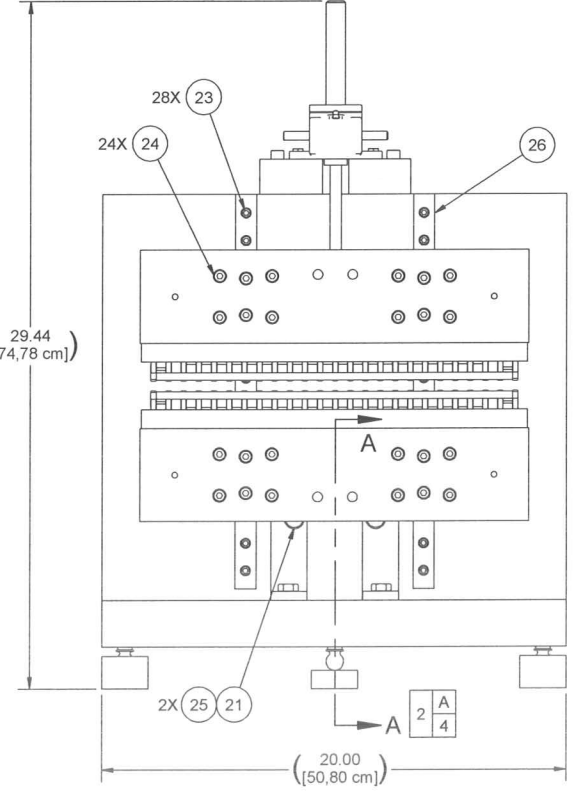
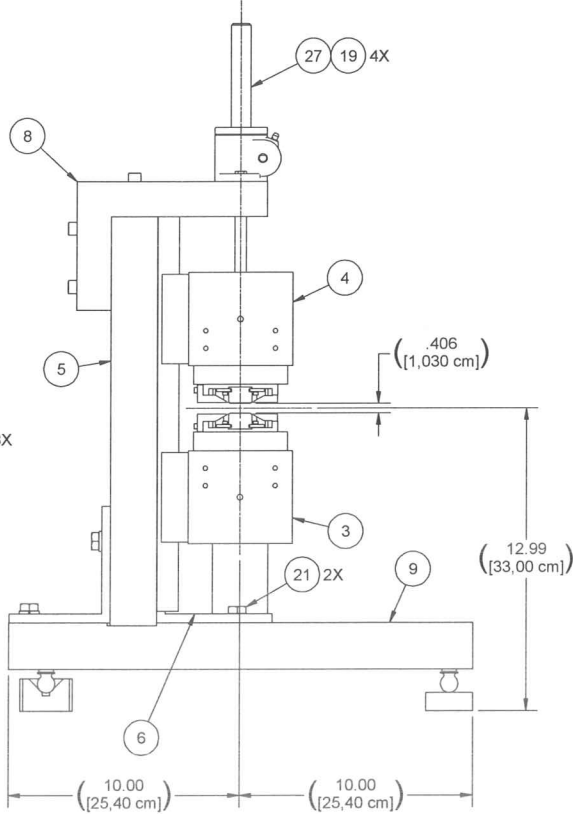
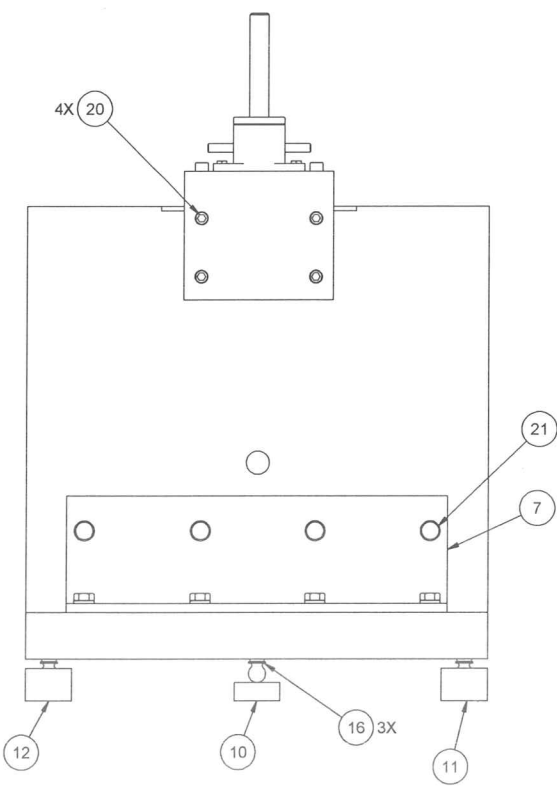
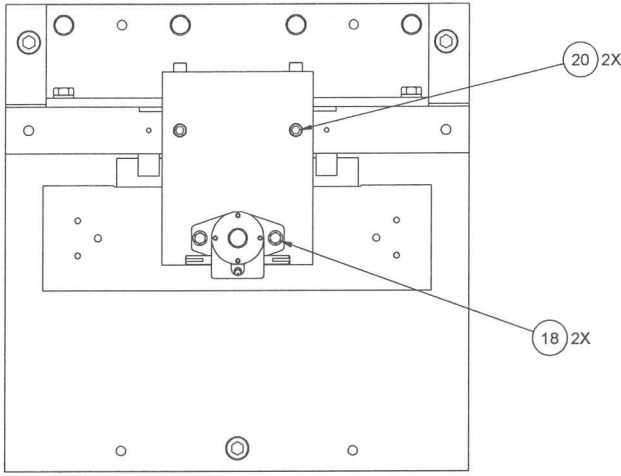
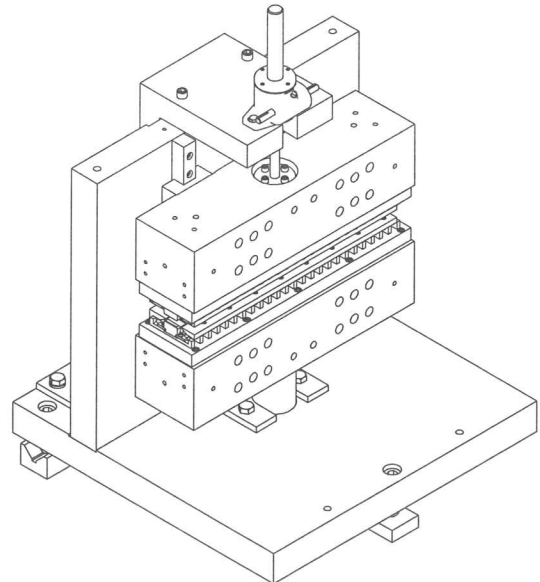


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 USED FOR ANY PURPOSE EXCEPT WHEN SUCH USER POSSESSES DIRECT  
 WRITTEN AUTHORIZATION FROM STI OPTRONICS

**NOTES:**

- 1 CENTURY SPRING CORP.  
222 E. 16th St.  
LOS ANGELES, CA 90015  
800.237.5225.
- 2 McMASTER-CARR P.O. BOX 54960  
LOS ANGELES, CA 90054-0960  
562.692.5911.
- 3 MINARIK  
2561 152nd AVE. N.E.  
REDMOND, WA 98052  
MAX SUTLIN 206.448.8817.
- 4 JOYCE-DAYTON CORP.  
P.O. BOX 1630  
DAYTON, OH 45401  
800.523.5204  
500LB. CAPACITY JACK, INVERTED  
WITH LOAD PAD & EXTENDING SCREW STOP.
- 5 TORQUE FASTENERS AS FOLLOWS:  
1/4 - 75 IN/LBS  
3/8 - 19 FT/LBS  
1/2 - 43 FT/LBS  
M6 - 6 FT/LBS  
M8 - 11 FT/LBS.
- 6 MODIFY ITEM 2 AS SHOWN ON SHEET 2.  
PRECISION SHAFT PART NO. 8364T18  
303 STAINLESS STEEL FROM McMASTER-CARR.



REVISION HISTORY									
APPROVED									
ZONE	REV	DESCRIPTION	DATE	DESIGNER	CHECKER	MANUFACTURING	QA	ENGINEER	PROJECT MGR

RELEASED  
 SEP 24 2009  
 BY [Signature]

FOR OFFICIAL USE ONLY

QTY	PART NUMBER	DESCRIPTION	MATERIAL	ITEM
1	WJ500I2S-003.00-STDX-STDX-STO	QUARTER TON SCREW JACK 3 IN. TRAVEL		27
1	RA250430EMC2-**P6Z3-II	LINEAR RAIL ASSY	NSK	26
10	LW-1/2-316	HELICAL LOCKWASHER 1/2 REGULAR	UNS S31600, SS 316	25
24	SHCS-M8 X 30-316	SHCS M8 X 1.25-6g X 30	UNS S31600, SS 316	24
28	SHCS-M6X25-304SS	SHCS M6 X 1-6g X 25	UNS S30400, SS 304	23
3	SHCS 5-8-18 UNRF x 1.25	SHCS 5/8-18 UNRF-3A X 1.25	UNS S30400, SS 304	22
12	HHCS1/2-C20-304	HHCS 1/2-13 UNC-2A X 1-1/4, ASME B18.2.1	UNS S30400, SS 304	21
6	SHCS3/8-C36-316	SHCS 3/8-16 UNRC-3A X 2-1/4, ASME B18.3	UNS S31600, SS 316	20
4	SHCS1/4-C16-316	SHCS 1/4-20 UNRC-3A X 1, ASME B18.3	UNS S31600, SS 316	19
2	HHCS1/4-C14-316	HHCS 1/4-20 UNC-2A X 7/8, ASME B18.2.1	UNS S31600, SS 316	18
1	D-9321236	DIE SPRING 2 IN DIA X 327 LB/IN	CHROME ALLOY STEEL	17
3	8481A29	TOOLING BALL	ASTM A574 ALLOY STEEL	16
1	6391K423	BRONZE BEARING 1 IN. I.D.	SELF-LUBRICATING BRONZE, SAE 841	15
1	1948-5300-3	SPRING PLUG	UNS A96061, ALUM 6061-T651	14
1	1948-5300-1	SPRING RETAINER PIPE 2 SCH 40	UNS A96061, ALUM 6061-T6	13
1	1948-5230-3	CONICAL BLOCK	ASTM A36 STEEL	12
1	1948-5230-2	V BLOCK	ASTM A36 STEEL	11
1	1948-5230-1	FLAT BLOCK	ASTM A36 STEEL	10
1	1948-5220-2	KINEMATIC MOUNTING PLATE	UNS A96061, ALUM 6061-T6	9
1	1948-5210-7	SCREW JACK MOUNTING PLATE	UNS A96061, ALUM 6061-T6511	8
1	1948-5210-6	REAR MOUNTING ANGLE	UNS A96061, ALUM 6061-T6	7
1	1948-5210-5	FRONT MOUNTING ANGLE	UNS A96061, ALUM 6061-T6	6
1	1948-5120-2	RAIL MOUNTING PLATE	MIC-6 ALUM TOOLING PLATE	5
1	1948-3100-2	33mm UPPER STRONGBACK ASSY		4
1	1948-3100-1	33mm LOWER STRONGBACK ASSY		3
1	1948-3000-2	PRECISION SHAFT, MODIFIED	UNS S30300, SS 303	2
-	-1	33mm UNDULATOR ASSEMBLY		1

UNLESS OTHERWISE SPECIFIED		CONTRACT NUMBER	
DIMENSIONS ARE IN INCHES	TOLERANCES ARE	APPROVAL	DATE
DECIMALS	ANGLES	DR	9/24/2009
.XX ± .02	∠ ± .30	CHECK	
.XXX ± .005		DATE	
SURFACE TEXTURE SHALL BE	MFG	DATE	
NY	MO	9-24-09	
INTERPRET PER	CA	9/24/09	
ASME Y14.5M-1994	W		
DO NOT SCALE DRAWING	ENGINEER		
CALC. WT.	PROJ		
276 LBS.	SS		

**STI OPTRONICS** BELLEVUE, WA

33mm UNDULATOR ASSY

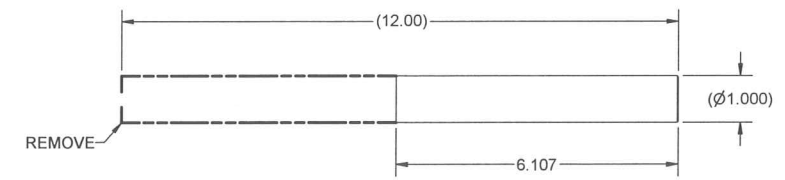
SCALE: 1/4

DATE: SEP 24 2009

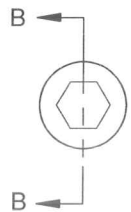
SHEET 1 OF 2

PART OR IDENTIFICATION NUMBER	NEXT ASSEMBLY	USED ON	APPLICATION
1948			

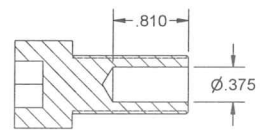
STI PROPRIETARY  
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 WRITTEN AUTHORIZATION FROM STI OPTRONICS



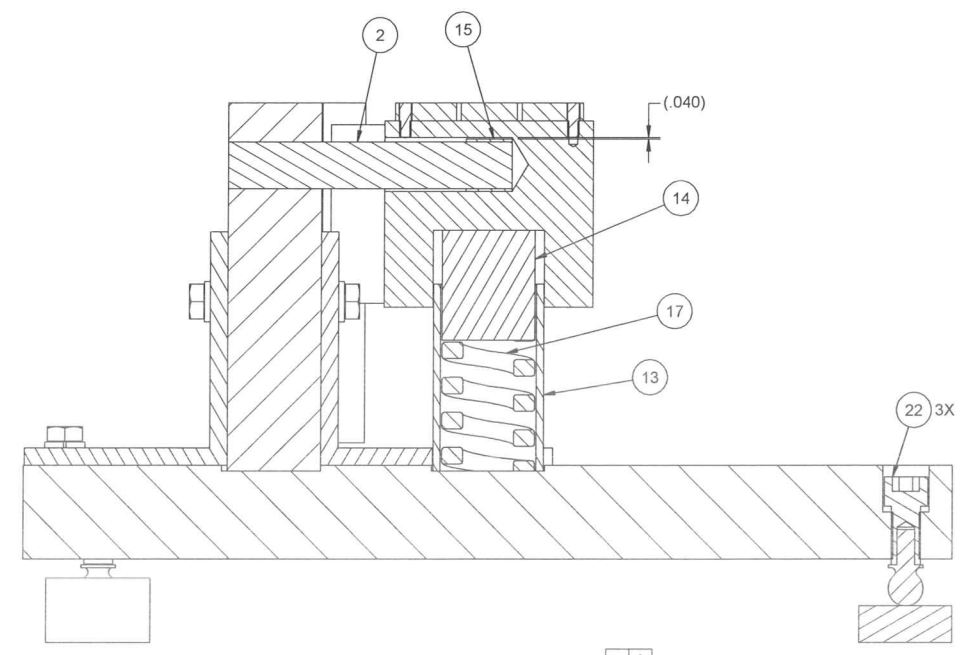
**ITEM 2**  
 SCALE 1/2



**ITEM 22**  
 SCALE 1:1



**SECTION B-B**



**SECTION A-A** 1/4  
 SCALE 1/2

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 SEP 24 2009  
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**STI OPTRONICS** BELLEVUE, WA

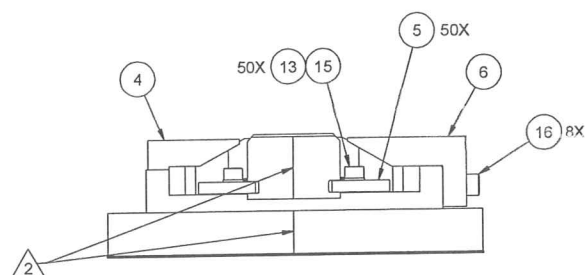
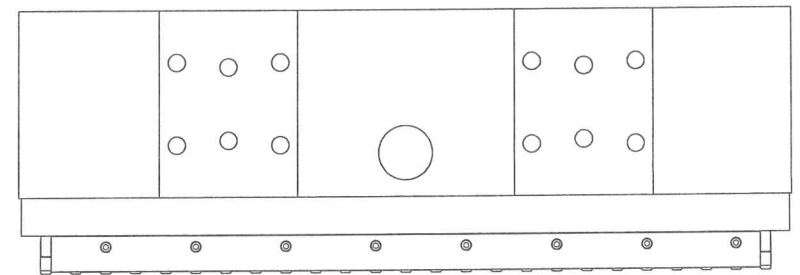
33mm UNDULATOR ASSY

SIZE	CAGE CODE	DRAWING NUMBER	REV
D	5D320	1948-3000	-
SCALE NOTED		SEP 24 2009	SHEET 2 OF 2

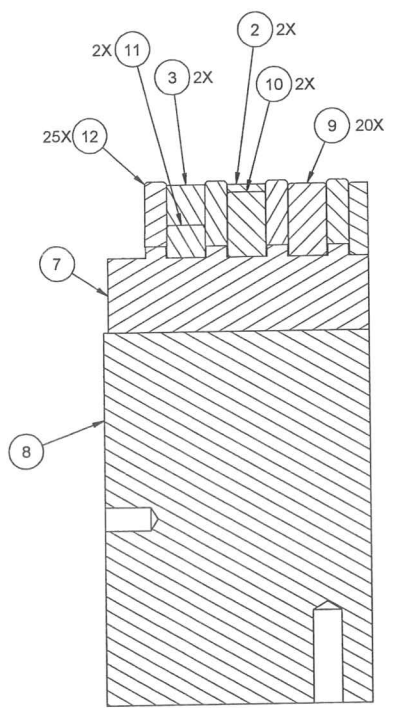
STI PROPRIETARY  
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- NOTES:**
- 1 BOKERS, INC. 3140 SNELLING AVE.  
MINNEAPOLIS, MN 55406-1937  
800.927.4377.
  - 2 ESTABLISH POLE CENTERLINE & SCRIBE  
LINE .005 IN. WIDE X .005 IN. DEEP ON  
UPSTREAM & DOWNSTREAM ENDS OF MAGBASE.
  - 3 TORQUE FASTENERS AS FOLLOWS:  
#4 - 5 IN/LB  
#5 - 7 IN/LB  
#6 - 9 IN/LB  
1/4 - 65-75 IN/LB.
  - 4 APPLY LPS TO POLES TO PREVENT RUST.

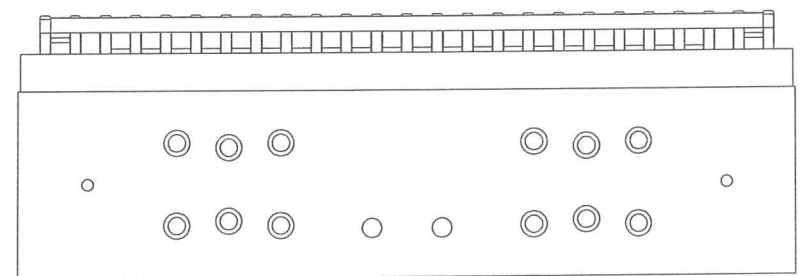
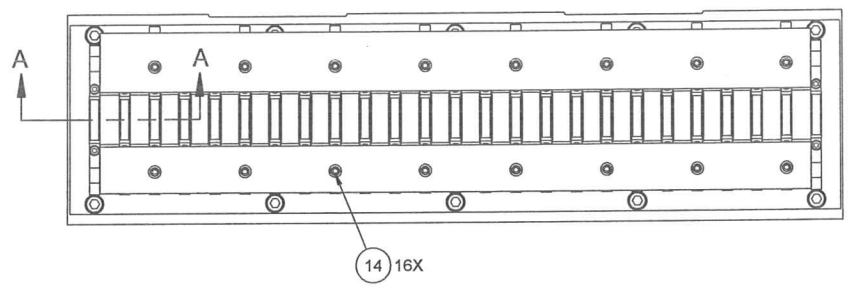
REVISION HISTORY				APPROVED			
ZONE	REV	DESCRIPTION	DATE	DESIGNER	CHECKER	MANUFACTURING	QA



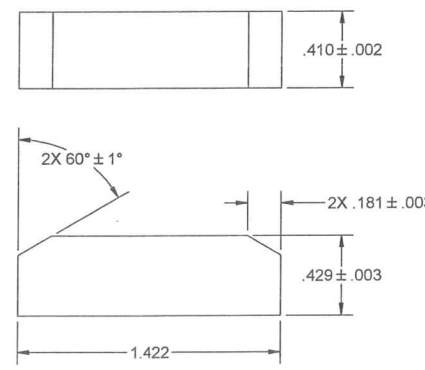
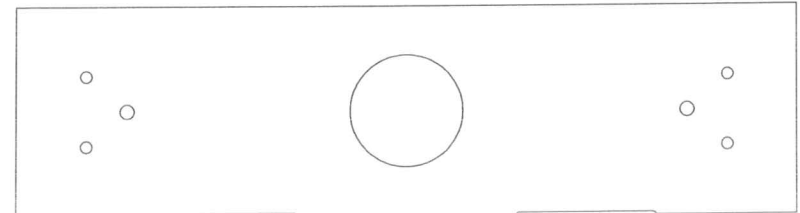
**DETAIL B**  
SCALE 1 : 1



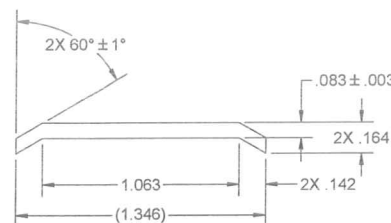
**SECTION A-A**  
SCALE 1 : 1



**-1 LOWER STRONGBACK ASSY**



**-4**  
SCALE 2 : 1



**-3**  
SCALE 2 : 1

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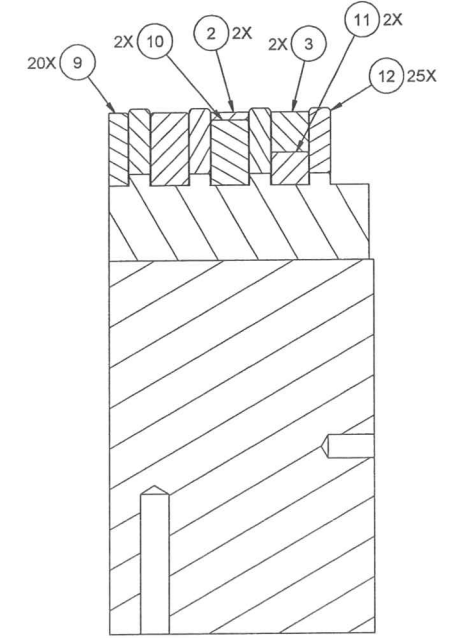
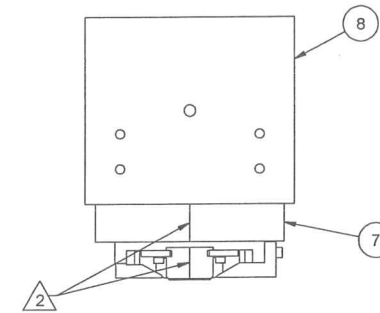
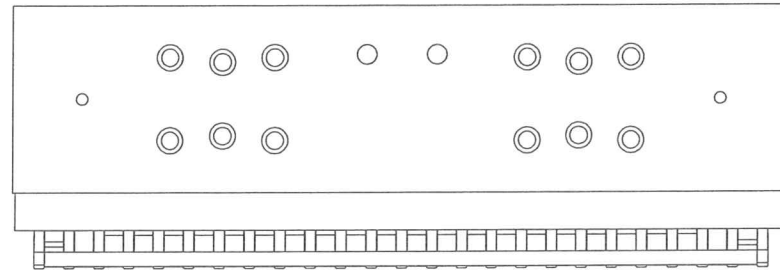
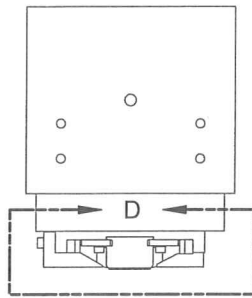
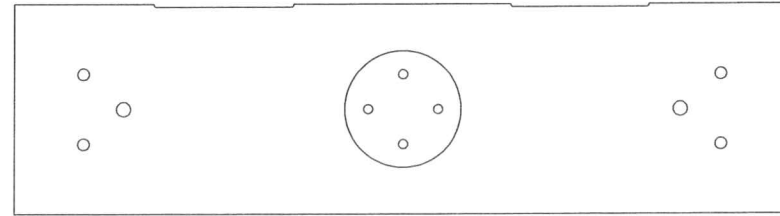
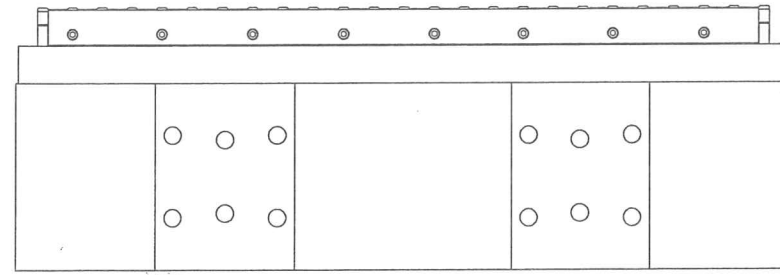
QTY	PART NUMBER	DESCRIPTION	MATERIAL	ITEM
10	SHCS1/4-C14-316	SHCS 1/4-20 UNRC-3A X 7/8, ASME B18.3	UNS S31600, SS 316	17
8	SHCS6-C8-304	SHCS 6-32 UNRC-3A X 1/2, ASME B18.3	UNS S30400, SS 304	16
50	SHCS5-F6-304	SHCS 5-44 UNRF-3A X 3/8, ASME B18.3	UNS S30400, SS 304	15
16	SHCS4-C14-304	SHCS 4-40 UNRC-3A X 7/8, ASME B18.3	UNS S30400, SS 304	14
50	930833	WASHER, FLAT .220 OD x .147 ID x .025	2024-T3 ALUM	13
25	1948-5163-1	STRAIGHT POLE	MAGNETIC IRON, ASTM A848	12
2	1948-5160-3	REDUCED HEIGHT MAGNET 4,26mm	Nd-Fe	11
2	1948-5160-2	REDUCED HEIGHT MAGNET 13,42mm	Nd-Fe	10
20	1948-5160-1	MAGNET	Nd-Fe & SEE NOTE 3	9
1	1948-3300-1	33mm LOWER STRONGBACK	UNS A96061, ALUM 6061-T651	8
1	1948-3201-1	MAGNET/POLE BASE	UNS A96061, ALUM 6061-T6	7
1	1948-3104-1	MAGNET CLAMP/REGISTER	FREE MACHINING BRASS	6
50	1948-3103-2	POLE CLAMP	UNS S30300, SS 303	5
1	1948-3103-1	MAGNET CLAMP	FREE MACHINING BRASS	4
2	1948-3100-4	MAGNET SPACER	UNS A96061, ALUM 6061-T6	3
2	1948-3100-3	MAGNET SPACER	UNS A96061, ALUM 6061-T6	2
-	-1	33mm LOWER STRONGBACK ASSY		1

UNLESS OTHERWISE SPECIFIED		CONTRACT NUMBER		APPROVAL		DATE		TITLE	
DIMENSIONS ARE IN INCHES	TOLERANCES ARE	DECIMALS	ANGLES	DRAWN	BK	9/23/2009		<b>STI OPTRONICS</b> BELLEVUE, WA  <b>33mm STRONGBACK ASSY</b>	
.X ± .1	.X ± .1	.X ± .1	.X ± .1	CHECK					
.X ± .02	.X ± .02	.X ± .02	.X ± .02						
.X ± .005	.X ± .005	.X ± .005	.X ± .005						
SURFACE TEXTURE SHALL BE		INTERPRET PER		SCALE		DRAWING NUMBER		REV	
ASME Y14.5M-1994		ASME Y14.5M-1994		1/2		1948-3100		-	
DO NOT SCALE DRAWING		CALC. WT.		SCALE		SHEET		OF	
		-1=40.4 LBS. -2=41.3 LBS.		1/2		1 OF 2			

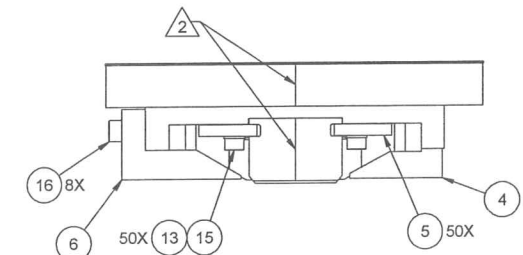
PART OR IDENTIFICATION NUMBER	NEXT ASSEMBLY	USED ON
-1, -2	1948-3000	1948

APPLICATION

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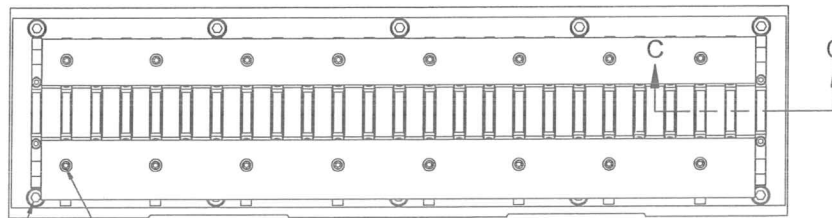


SECTION C-C  
 SCALE 1:1



DETAIL D  
 SCALE 1:1

-2 UPPER STRONGBACK ASSY



10X 17  
 14 16X

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10	SHCS1/4-C20-304	SHCS 1/4-20 UNRC-3A X 1-1/4, ASME B18.3	UNS S30400, SS 304	17
8	SHCS6-C8-304	SHCS 6-32 UNRC-3A X 1/2, ASME B18.3	UNS S30400, SS 304	16
50	SHCS5-F6-304	SHCS 5-44 UNRF-3A X 3/8, ASME B18.3	UNS S30400, SS 304	15
16	SHCS4-C14-304	SHCS 4-40 UNRC-3A X 7/8, ASME B18.3	UNS S30400, SS 304	14
50	930833	WASHER, FLAT .220 OD x .147 ID x .025	2024-T3 ALUM	13
25	1948-5163-1	STRAIGHT POLE	MAGNETIC IRON, ASTM A848	12
2	1948-5160-3	REDUCED HEIGHT MAGNET 4,26mm	Nd-Fe	11
2	1948-5160-2	REDUCED HEIGHT MAGNET 13,42mm	Nd-Fe	10
20	1948-5160-1	MAGNET	Nd-Fe & SEE NOTE 3	9
1	1948-3300-2	33mm UPPER STRONGBACK	UNS A96061, ALUM 6061-T651	8
1	1948-3201-1	MAGNET/POLE BASE	UNS A96061, ALUM 6061-T6	7
1	1948-3104-1	MAGNET CLAMP/REGISTER	FREE MACHINING BRASS	6
50	1948-3103-2	POLE CLAMP	UNS S30300, SS 303	5
1	1948-3103-1	MAGNET CLAMP	FREE MACHINING BRASS	4
2	1948-3100-4	MAGNET SPACER	UNS A96061, ALUM 6061-T6	3
2	1948-3100-3	MAGNET SPACER	UNS A96061, ALUM 6061-T6	2
-	-2	33mm UPPER STRONGBACK ASSY		1
QTY	PART NUMBER	DESCRIPTION	MATERIAL	ITEM

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 Control #1

PARTS LIST

**STI OPTRONICS** BELLEVUE, WA

TITLE  
 33mm STRONGBACK ASSY

SIZE	CADE CODE	DRAWING NUMBER	REV
D	5D320	1948-3100	-

SCALE 1/2  
 SHEET 2 OF 2

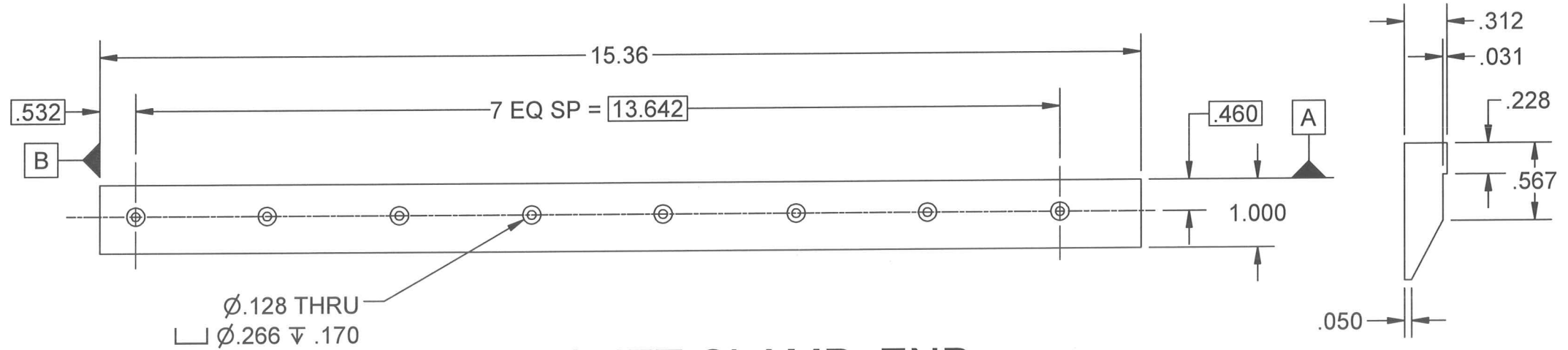
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**NOTES:**

1. REMOVE ALL BURRS & BREAK SHARP EDGES.

REV	DESCRIPTION	DATE	DESIGNER	CHECKER	MANUFACTURING	QA	ENGINEER	PROJECT MGR

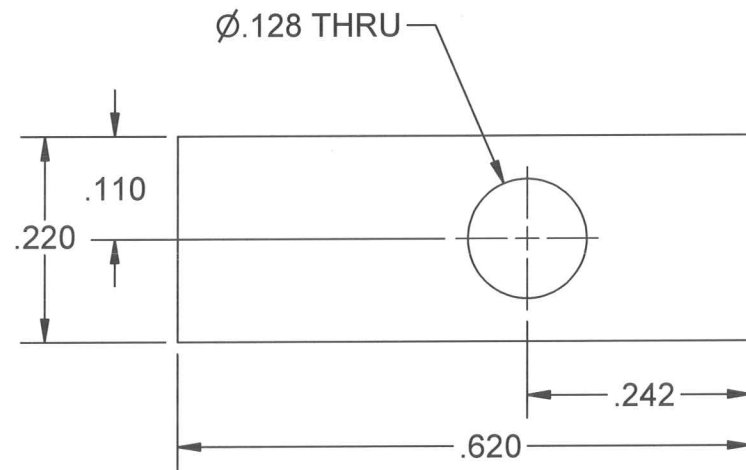


**-1 MAGNET CLAMP, END**

SCALE 1 / 2

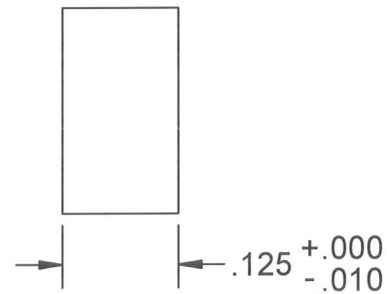
**-1 END VIEW**

SCALE 1 : 1



**-2 POLE CLAMP**

SCALE 5 : 1



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SEP 11 2009

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Control #1

FOR OFFICIAL USE ONLY

QTY	PART NUMBER	DESCRIPTION	MATERIAL	ITEM
1	1948-3103-2	POLE CLAMP	UNS S30300, SS303	2
1	1948-3103-1	MAGNET CLAMP	FREE MACHINING BRASS	1

PARTS LIST

-1, -2	1948-3100	1948
PART OR IDENTIFICATION NUMBER	NEXT ASSEMBLY	USED ON
APPLICATION		

<p>UNLESS OTHERWISE SPECIFIED</p> <p>DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES ARE:</p> <p>DECIMALS ANGLES</p> <p>.X ± .1 ± 0° 30'</p> <p>.XX ± .02</p> <p>.XXX ± .005</p> <p>SURFACE TEXTURE SHALL BE 125/√</p> <p>INTERPRET PER ASME Y14.5M-1994</p> <p>DO NOT SCALE DRAWING</p> <p>CALC. WT.</p>	CONTRACT NUMBER	
	APPROVAL	DATE
	DRAWN BK	9/10/2009
	CHECK	
	MFG/QA MO	9-11-09
ENGINEER		
PROJECT MGR	<i>[Signature]</i>	<i>[Signature]</i>

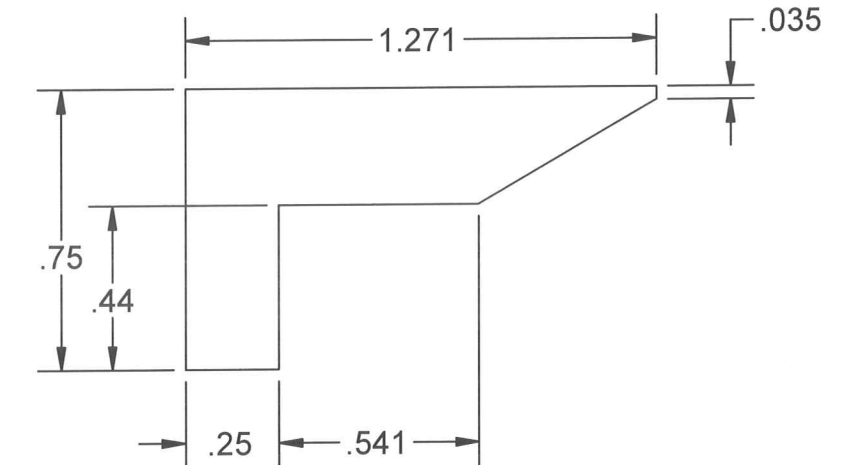
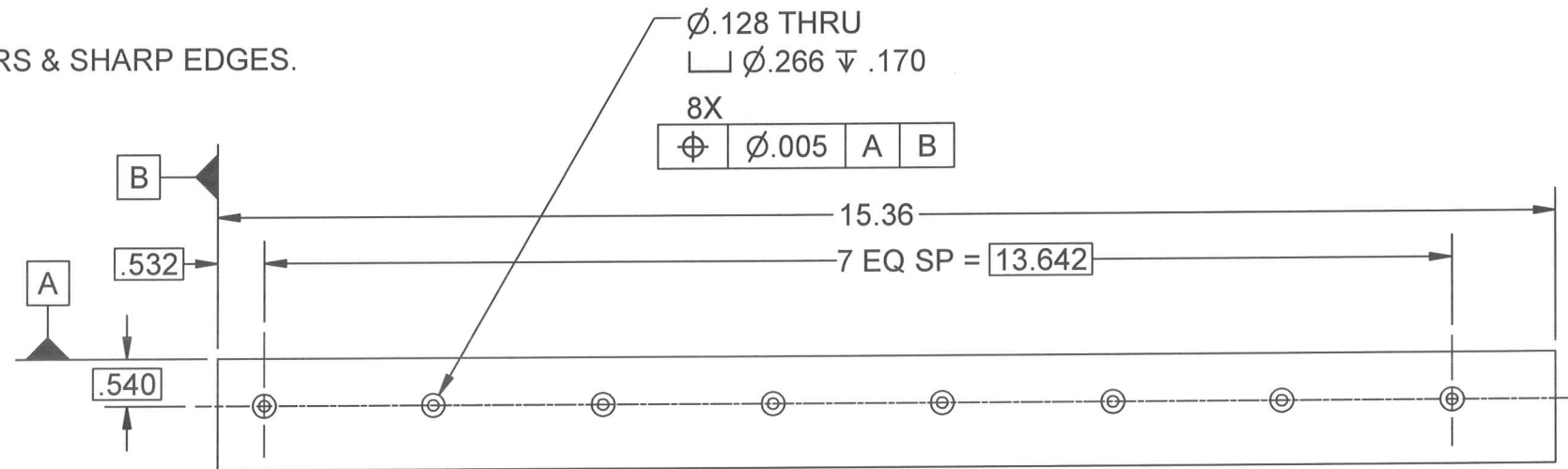
<b>STI OPTRONICS</b> BELLEVUE, WA.			
CLAMPS			
SIZE B	CAGE CODE 5D320	DRAWING NUMBER 1948-3103	REV -
SCALE NOTED	RELEASE DATE SEP 11 2009	SHEET 1 OF 1	

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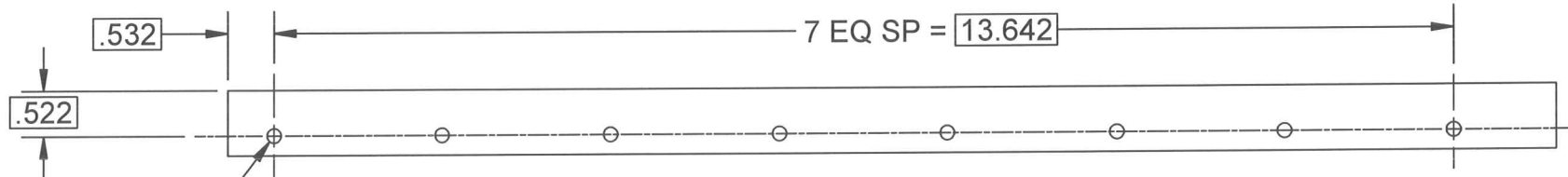
**NOTES:**

1. REMOVE ALL BURRS & SHARP EDGES.

REV	DESCRIPTION	DATE	DESIGNER	CHECKER	MANUFACTURING	QA	ENGINEER	PROJECT MGR
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**VIEW A-A**  
 SCALE 2 : 1



8X  $\varnothing$ .164 THRU  
 $\varnothing$  .005 A B

**-1 MAGNET CLAMP/REGISTER, END**

RELEASED  
 SEP 11 2009  
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 #1

FOR OFFICIAL USE ONLY

QTY	PART NUMBER	DESCRIPTION	MATERIAL	ITEM
1	1948-3104-1	MAGNET CLAMP/REGISTER	FREE MACHINING BRASS	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMALS ANGLES .X ± .1 ± 0° 30' .XX ± .02 .XXX ± .005 SURFACE TEXTURE SHALL BE 125/✓ INTERPRET PER ASME Y14.5M-1994 DO NOT SCALE DRAWING CALC. WT.	CONTRACT NUMBER	
	APPROVAL	DATE
	DRAWN BK	9/10/2009
	CHECK	
	MEG/OA MO	9-10-09
	ENGINEER	
	PROJECT MGR <i>[Signature]</i>	9/10/09

<b>STI OPTRONICS</b> BELLEVUE, WA.			
MAGNET CLAMP/REGISTER			
SIZE <b>B</b>	CAGE CODE <b>5D320</b>	DRAWING NUMBER <b>1948-3104</b>	REV -
SCALE 1/2	RELEASE DATE SEP 11 2009	SHEET 1 OF 1	

-1	1948-3100	1948
PART OR IDENTIFICATION NUMBER	NEXT ASSEMBLY	USED ON
APPLICATION		

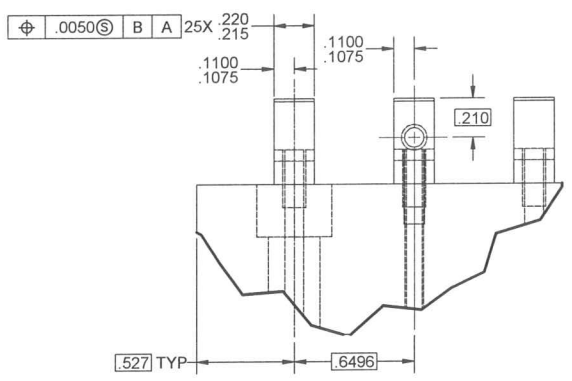


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 WRITTEN AUTHORIZATION FROM STI OPTRONICS.

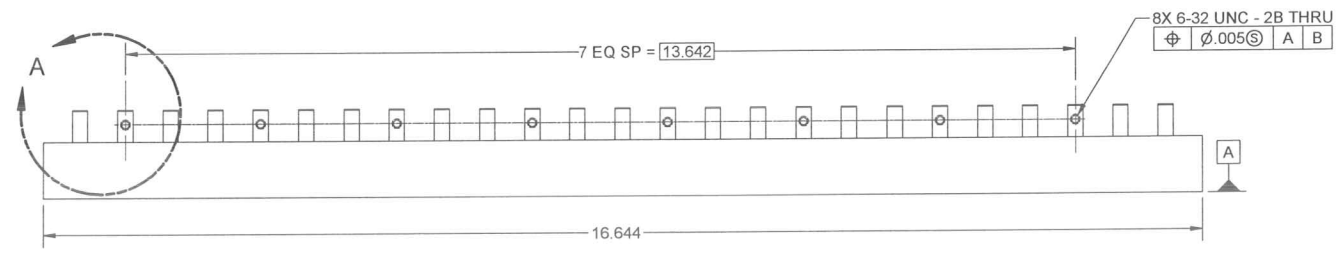
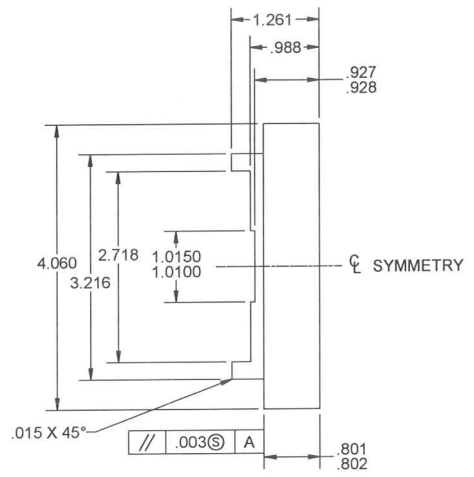
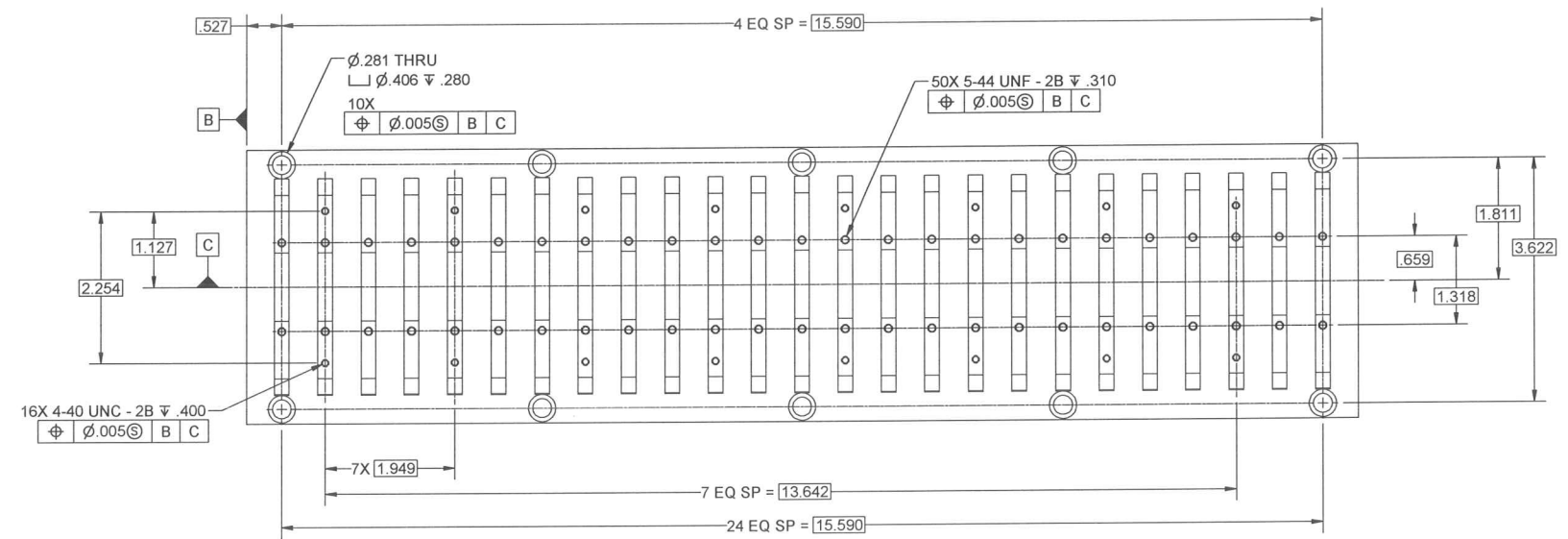
NOTES:

1. REMOVE ALL BURRS & SHARP EDGES.
2. STRESS RELIEVE PRIOR TO FINAL MACHINING.
3. SULPHURIC ANODIZE PER MIL-A-8625F TYPE II, CLASS 2, COLOR: BLUE.
4. TAPPED HOLE DEPTHS ARE FULL THREAD LENGTHS, TAP DRILL THRU ACCEPTABLE.

REVISION HISTORY				APPROVED			
ZONE	REV	DESCRIPTION	DATE	DESIGNER	CHECKER	MANUFACTURING	QA



DETAIL A  
 SCALE 2 : 1



-1 MAGNET/POLE BASE

RELEASED  
 SEP 11 2009  
 BY *[Signature]*

FOR OFFICIAL USE ONLY

QTY	PART NUMBER	DESCRIPTION	MATERIAL	ITEM
1	1948-3201-1	MAGNET/POLE BASE	UNS A96061, ALUM 6061-T6	1

UNLESS OTHERWISE SPECIFIED		CONTRACT NUMBER		APPROVAL		DATE		TITLE	
DIMENSIONS ARE IN INCHES									
TOLERANCES ARE									
DECIMALS									
ANGLES									
X ± .1									
XX ± .03									
XXX ± .010									
SURFACE TEXTURE SHALL BE									
INTERPRET PER									
ASME Y14.5M-1994									
DO NOT SCALE DRAWING									
CALC. WT.									

PART OR IDENTIFICATION NUMBER	NEXT ASSEMBLY	USED ON
-1	1948-3100	1948

STI OPTRONICS BELLEVUE, WA

MAGNET/POLE BASE

SCALE 3/4  
 DATE 9/11/2009  
 SHEET 1 OF 1

8

7

6

5

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2

1

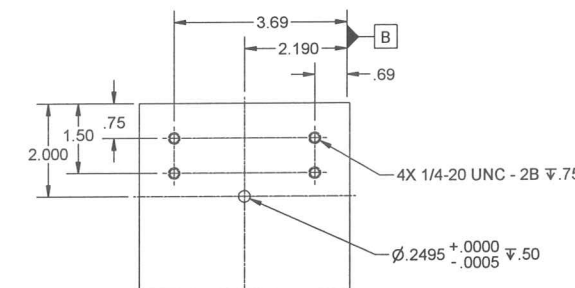
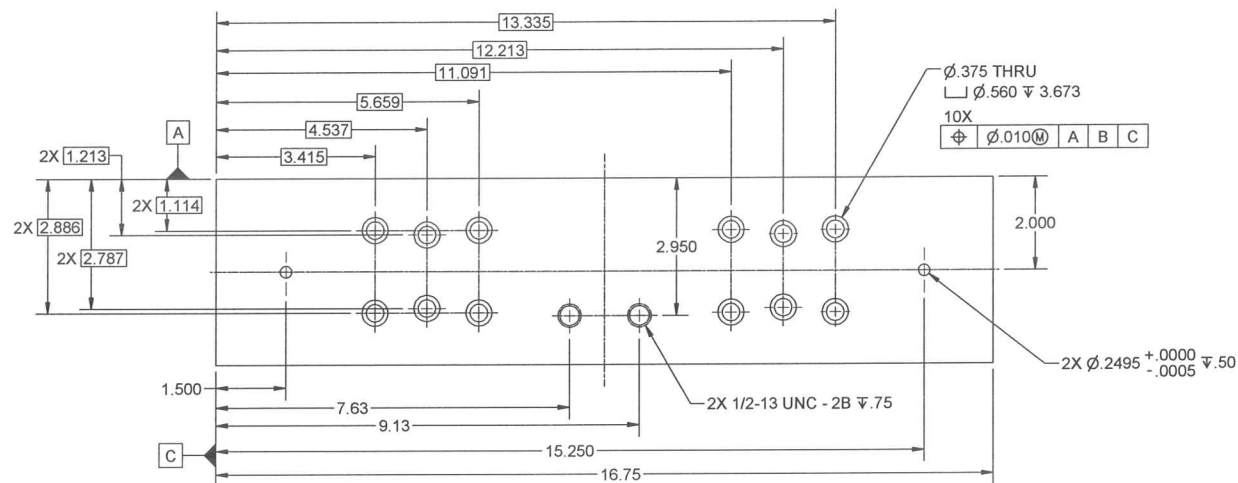
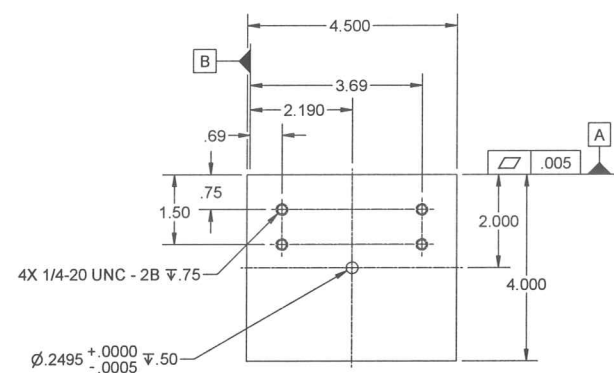
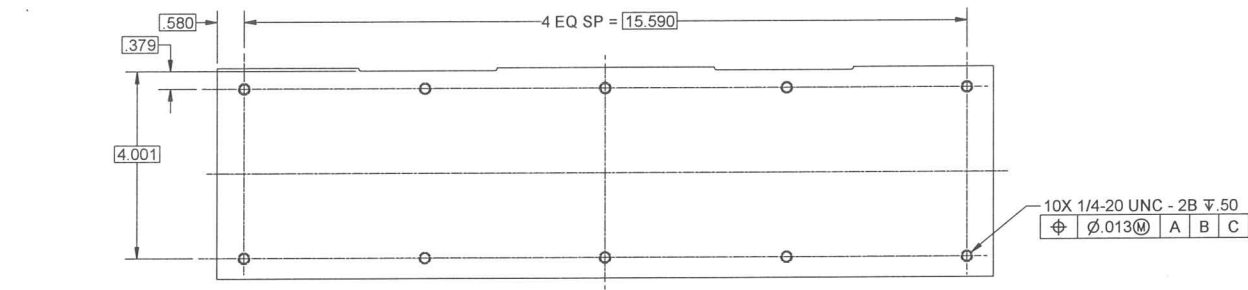
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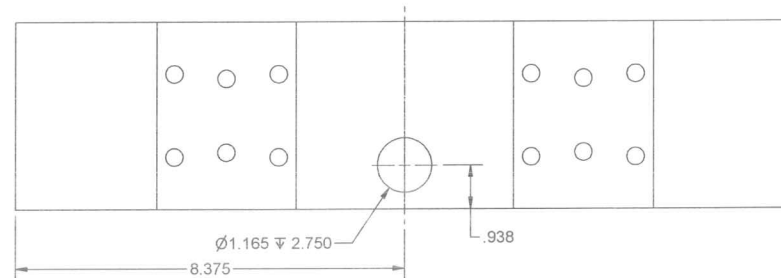
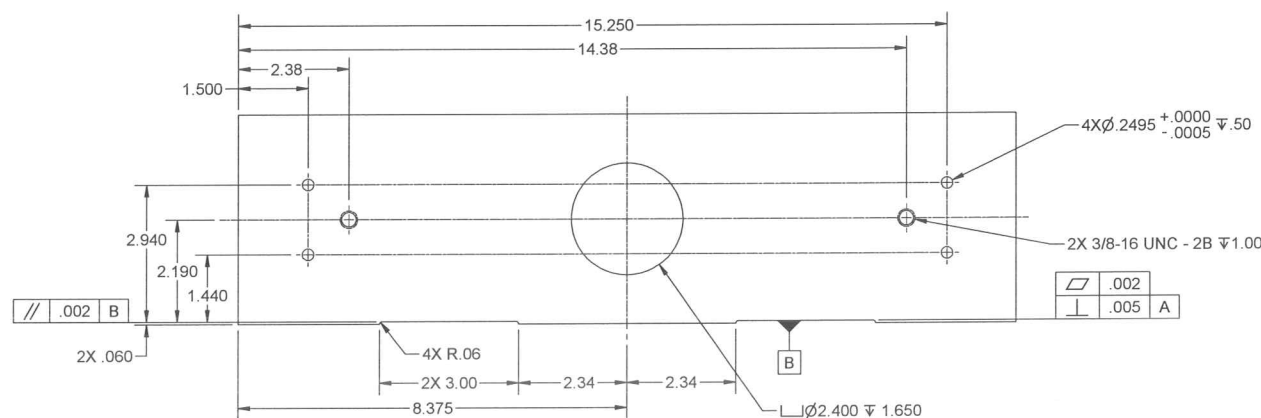
NOTES:

- 1. REMOVE ALL BURRS & SHARP EDGES.
- 2. SULPHURIC ANODIZE PER MIL-A-8625F TYPE II, CLASS 2, COLOR: BLUE.
- 3. STRESS RELIEVE MATERIAL PRIOR TO MACHINING.

REVISION HISTORY									
		APPROVED							
ZONE	REV	DESCRIPTION	DATE	DESIGNER	CHECKER	MANUFACTURING	QA	ENGINEER	PROJECT MGR



-1 LOWER STRONGBACK



RELEASED  
 SEP 24 2009  
 BY: [Signature]

FOR OFFICIAL USE ONLY

QTY	PART NUMBER	DESCRIPTION	MATERIAL	ITEM
1	1948-3300-2	33mm UPPER STRONGBACK	UNS A96061, ALUM 6061-T651	2
1	1948-3300-1	33mm LOWER STRONGBACK	UNS A96061, ALUM 6061-T651	1

PARTS LIST

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES  
 TOLERANCES ARE:  
 DECIMALS .XX ± .01  
 ANGLES ± 0° 30'  
 XX ± .02  
 XXX ± .05

SURFACE TEXTURE SHALL BE INTERPRET PER ASME Y14.5M-1994  
 DO NOT SCALE DRAWING

CONTRACT NUMBER: 1948-3100  
 APPROVAL: BK  
 DATE: 9/24/2009

STI OPTRONICS BELLEVUE, WA

33mm STRONGBACK

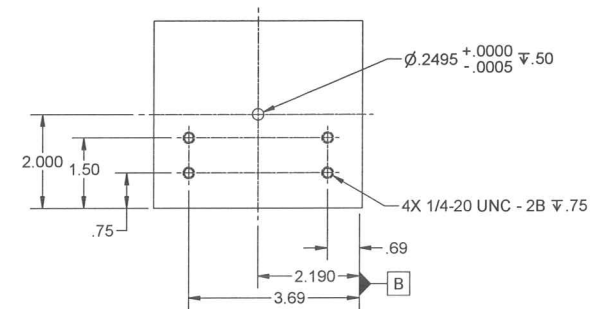
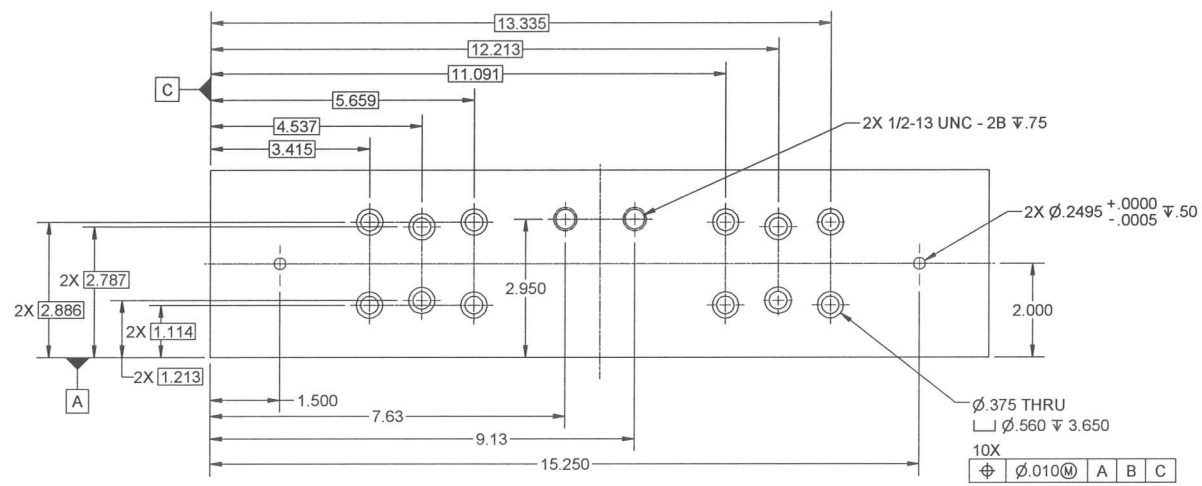
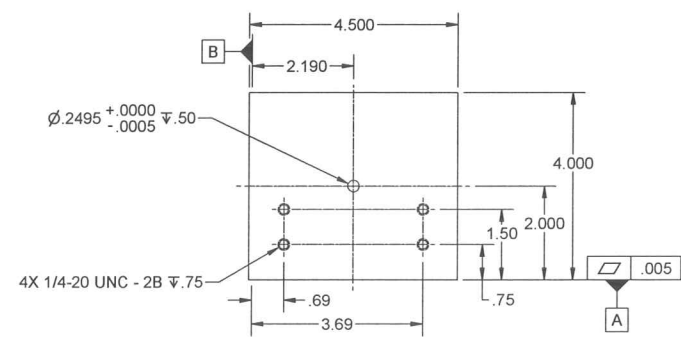
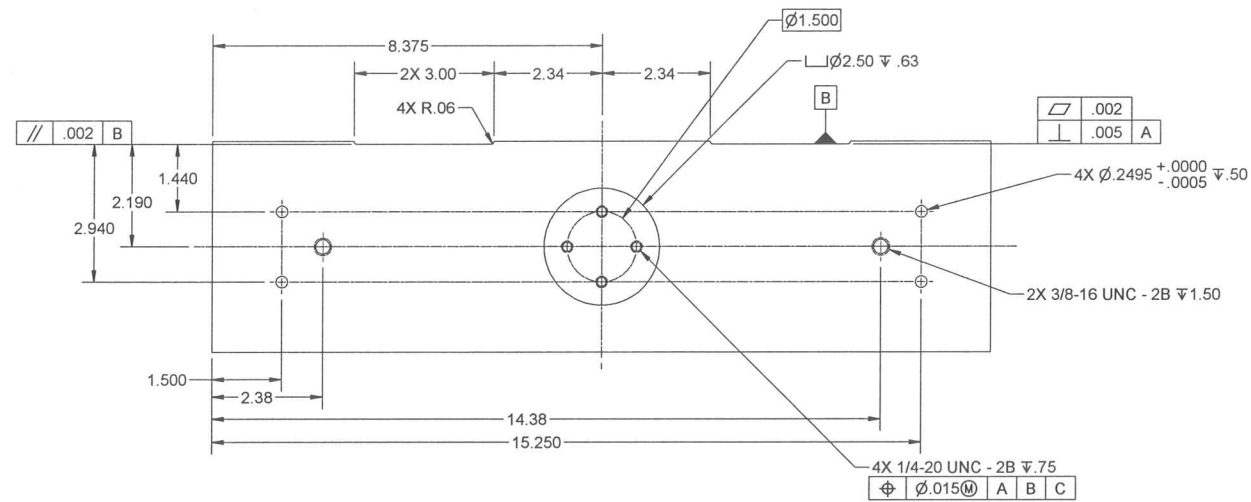
SCALE: 1/2  
 SHEET: 1 OF 2

PART OR IDENTIFICATION NUMBER	NEXT ASSEMBLY	USED ON
-1, -2	1948-3100	1948
APPLICATION		

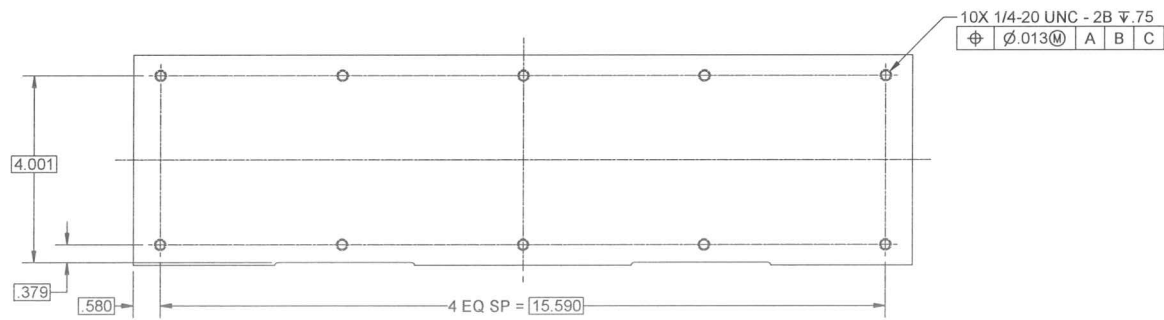


8 7 6 5 4 3 2 1

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-2 UPPER STRONGBACK



RELEASED  
SEP 24 2009  
BY

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**STI OPTRONICS** BELLEVUE, WA

33mm STRONGBACK

SIZE	CASE CODE	DRAWING NUMBER	REV
D	5D320	1948-3300	-
SCALE	DATE	SHEET	OF
1/2	SEP 24 2009	2	2

8 7 6 5 4 3 2 1

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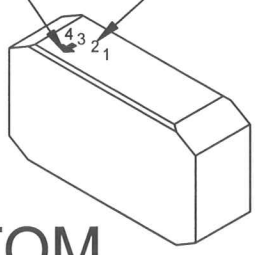
REV	DESCRIPTION	DATE	DESIGNER	CHECKER	MANUFACTURING	QA	ENGINEER	PROJECT MGR
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### NOTES:

- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS.
- THE SERIAL NUMBER & MAGNETIC NORTH VECTOR INDICATOR SHALL BE AFFIXED TO THE RIGHT END OF THE TOP FACE & THE LEFT END OF THE BOTTOM FACE IN THE ORIENTATION SHOWN. THE TOP VECTOR INDICATOR SHALL BE AN OPEN ARROW & THE BOTTOM VECTOR INDICATOR SHALL BE A FILLED ARROW. THE INDICATORS & SERIAL NUMBERS SHALL BE PERMANENT (IMPERVIOUS TO WATER, ACETONE, METHYL ALCOHOL) AND SHALL NOT PROTRUDE ABOVE THE FACE MORE THAN 0,003mm.
- MATERIAL & MAGNETIC SPECIFICATIONS PER "TECHNICAL SPECIFICATION 1948-5160.PDF".
- ALL PARTS SHALL BE SERIALIZED WITH A UNIQUE FOUR DIGIT NUMBER.
- BREAK ALL SHARP CORNERS 0,12mm.
- PERMISSIBLE HAIRLINE CRACKS ARE TO BE LESS THAN 10mm LONG & LESS THAN 0,5mm. DEEP. IN NO CASE SHALL HAIRLINE CRACKS COMPROMISE THE MECHANICAL STRENGTH OF THE MAGNET.
- CHIPS WHICH ARE NO MORE THAN 0,5mm X 0,5mm MAY BE CONSIDERED TO BE NOT VISIBLY DETECTABLE.
- AREA OF CHIPS SHALL NOT EXCEED 5% OF THE AREA OF ANY SURFACE EXCEPT AS NOTED.
- CHIP DEFINITION: A CRATER WHERE DIMENSIONS ARE NO MORE THAN 0.12 IN. X 0.12 IN. X 0.020 IN. DEEP.
- AREA OF CHIPS SHALL NOT EXCEED 1% OF THE AREA OF THESE SURFACES.
- CORROSION TREATMENT SHALL BE NICKEL PLATING OR OTHER METALLIC TREATMENT. PLATING THICKNESS SHALL NOT BE LESS THAN 0,010mm & NOT EXCEED 0,050mm.
- WITH THE EXCEPTION OF THE SERIAL NUMBER & NORTH VECTOR INDICATOR, THE MAGNET IS SYMMETRICAL IN FOUR ORIENTATIONS. THE MAGNET MAY BE USED IN ANY OF THE FOUR ORIENTATIONS, THEREFORE IT MUST BE INSPECTED FOR MECHANICAL TOLERANCES IN ALL FOUR ORIENTATIONS. FAILURE TO PASS INSPECTION IN ANY ORIENTATION IS CAUSE FOR REJECTION.
- ALL DIMENSIONS APPLY AFTER PLATING.

MAGNETIC ORIENTATION

SERIAL NUMBER

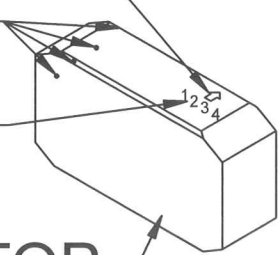


**-1 BOTTOM**

MAGNETIC ORIENTATION

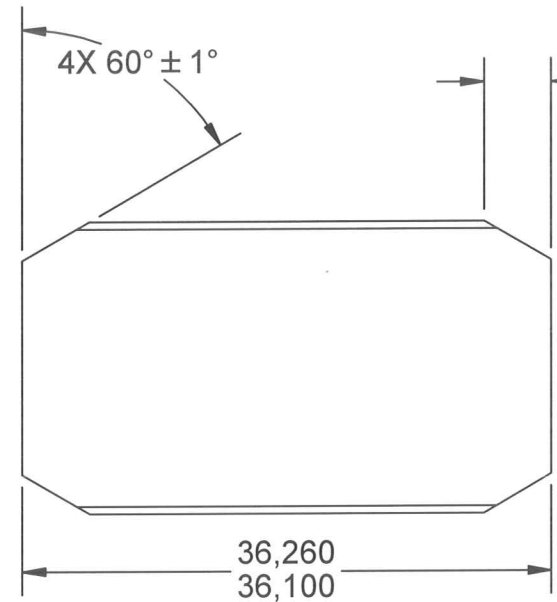
NO CHIPS ON THESE PROFILES NEAR & FAR SIDE

SERIAL NUMBER

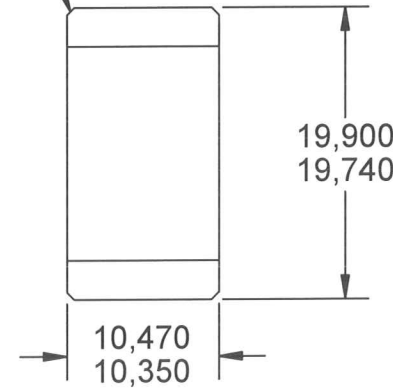


**-1 TOP**

SURFACE NEAR & FAR SIDE



4X ,508 ±0,100 X 45°



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 SEP 11 2009  
 BY

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QTY	PART NUMBER	DESCRIPTION	MATERIAL	ITEM
1	1948-5160-3	REDUCED HEIGHT MAGNET	Nd-Fe & SEE NOTE 3	3
1	1948-5160-2	REDUCED HEIGHT MAGNET	Nd-Fe & SEE NOTE 3	2
1	1948-5160-1	MAGNET	Nd-Fe & SEE NOTE 3	1

PARTS LIST

**UNLESS OTHERWISE SPECIFIED**  
 DIMENSIONS ARE IN MILLIMETERS  
 TOLERANCES ARE:  
 DECIMALS ANGLES  
 ±0.02 ±0.05  
 ±0.05 ±0.10  
 SURFACE TEXTURE SHALL BE 125  
 INTERPRET PER ASME Y14.5M-1994  
 DO NOT SCALE DRAWING  
 CALC. WT.

CONTRACT NUMBER	
APPROVAL	DATE
DRAWN BK	9/10/2009
CHECK	
MFG/QA <i>MO</i>	9-10-09
ENGINEER	
PROJECT MGR <i>[Signature]</i>	9/10/2009

**STI OPTRONICS** BELLEVUE, WA.

**MAGNET**

SIZE <b>B</b>	CAGE CODE <b>5D320</b>	DRAWING NUMBER <b>1948-5160</b>	REV <b>-</b>
SCALE <b>2/1</b>	RELEASE DATE <b>SEP 11 2009</b>	SHEET <b>1</b> OF <b>2</b>	

-1, -2, -3	1948-3100	1948
PART OR IDENTIFICATION NUMBER	NEXT ASSEMBLY	USED ON
APPLICATION		

4

3

2

1



B

B

A

A

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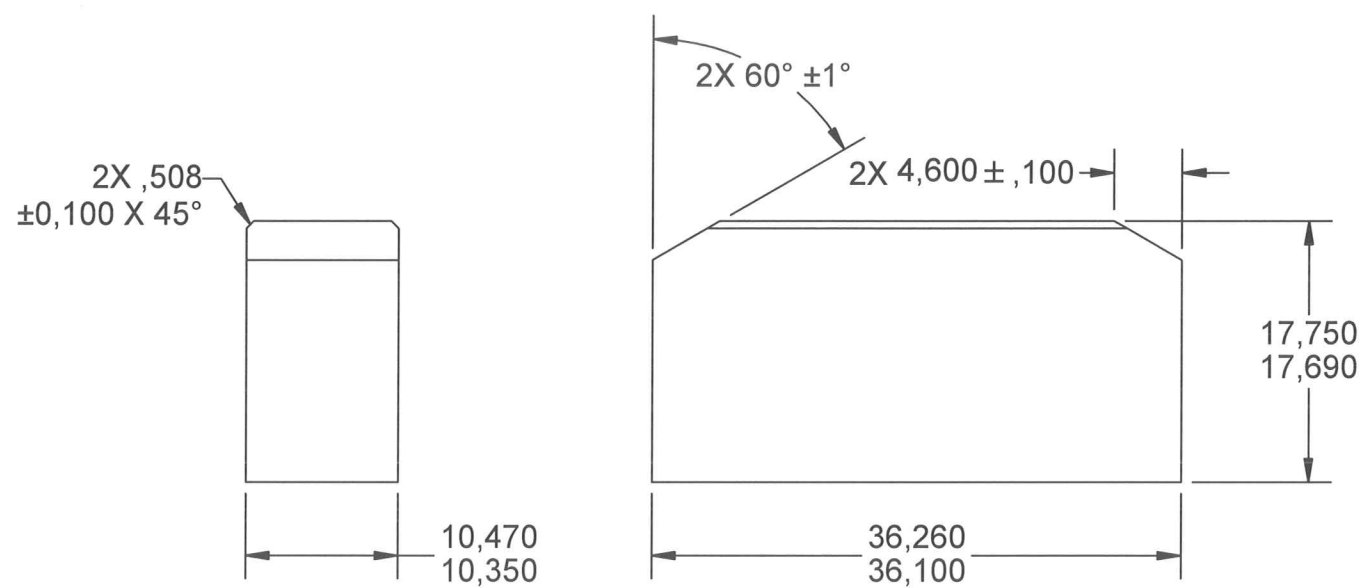
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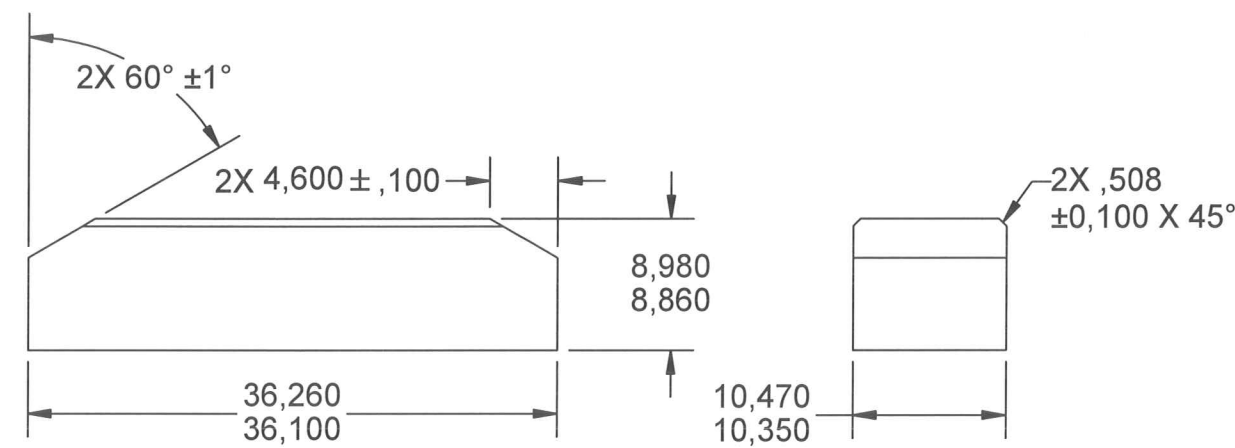
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B

B



-2



-3

RELEASED

SEP 11 2009

BY *[Signature]*  
#1

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A

A

<b>STI</b> OPTRONICS <small>BELLEVUE, WA.</small>			
TITLE <b>MAGNET</b>			
SIZE <b>B</b>	CAGE CODE <b>5D320</b>	DRAWING NUMBER <b>1948-5160</b>	REV -
SCALE 2/1	RELEASE DATE	SHEET 2 OF 2	

4

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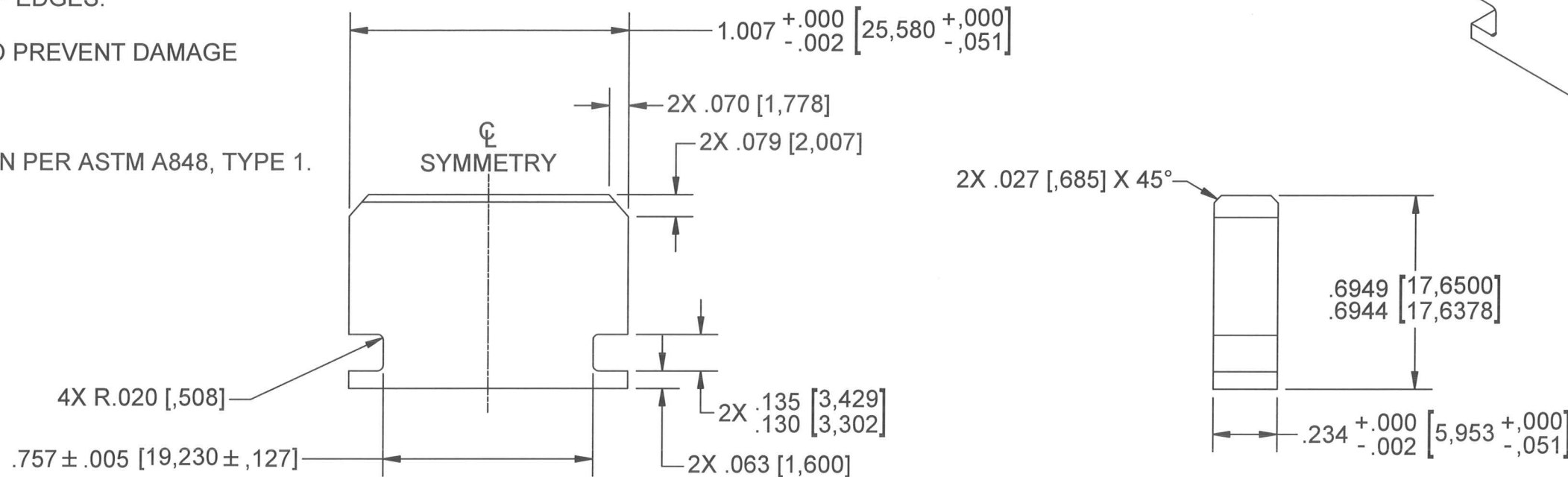
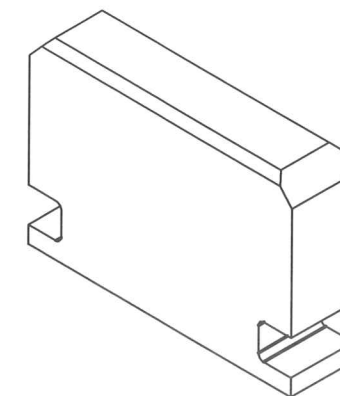
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REV	DESCRIPTION	DATE	DESIGNER	CHECKER	MANUFACTURING	QA	ENGINEER	PROJECT MGR
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### NOTES:

- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES [DIMENSIONS IN BRACKETS ARE MILLIMETERS].
- REMOVE ALL BURRS & SHARP EDGES.
- INDIVIDUALLY WRAP POLE TO PREVENT DAMAGE DURING SHIPMENT.
- STI WILL SUPPLY MATERIAL  
LOW CARBON MAGNETIC IRON PER ASTM A848, TYPE 1.  
1 PLATE 3/8" X 8" X 10".



-1

FOR OFFICIAL USE ONLY

1	1948-5163-1	STRAIGHT POLE	MAGNETIC IRON, ASTM A848	1
QTY	PART NUMBER	DESCRIPTION	MATERIAL	ITEM

RELEASED

SEP 04 2009

BY



UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:  
DECIMALS .X ± .1  
ANGLES ± 0° 30'  
.XX ± .02  
.XXX ± .005

SURFACE TEXTURE SHALL BE  
125/

INTERPRET PER  
ASME Y14.5M-1994

DO NOT SCALE DRAWING

CALC. WT. .05 LB.

CONTRACT NUMBER

APPROVAL DATE

DRAWN BK 9/4/2009

CHECK

MFG/QA

ENGINEER

PROJECT MGR

PARTS LIST



TITLE

STRAIGHT POLE

SIZE	CAGE CODE	DRAWING NUMBER	REV
B	5D320	1948-5163	-
SCALE	2/1	RELEASE DATE	SHEET 1 OF 1
		SEP 04 2009	

-1	1948-3100	1948
PART OR IDENTIFICATION NUMBER	NEXT ASSEMBLY	USED ON
APPLICATION		

4

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1