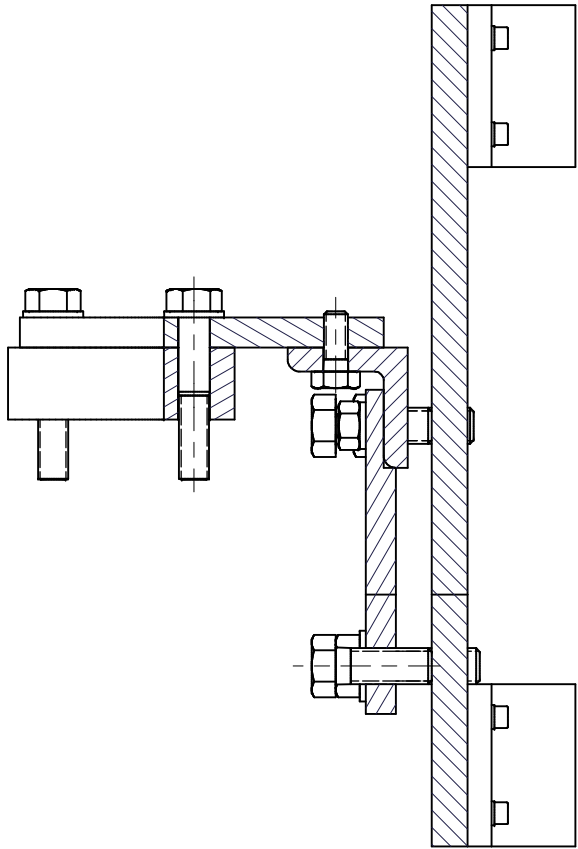
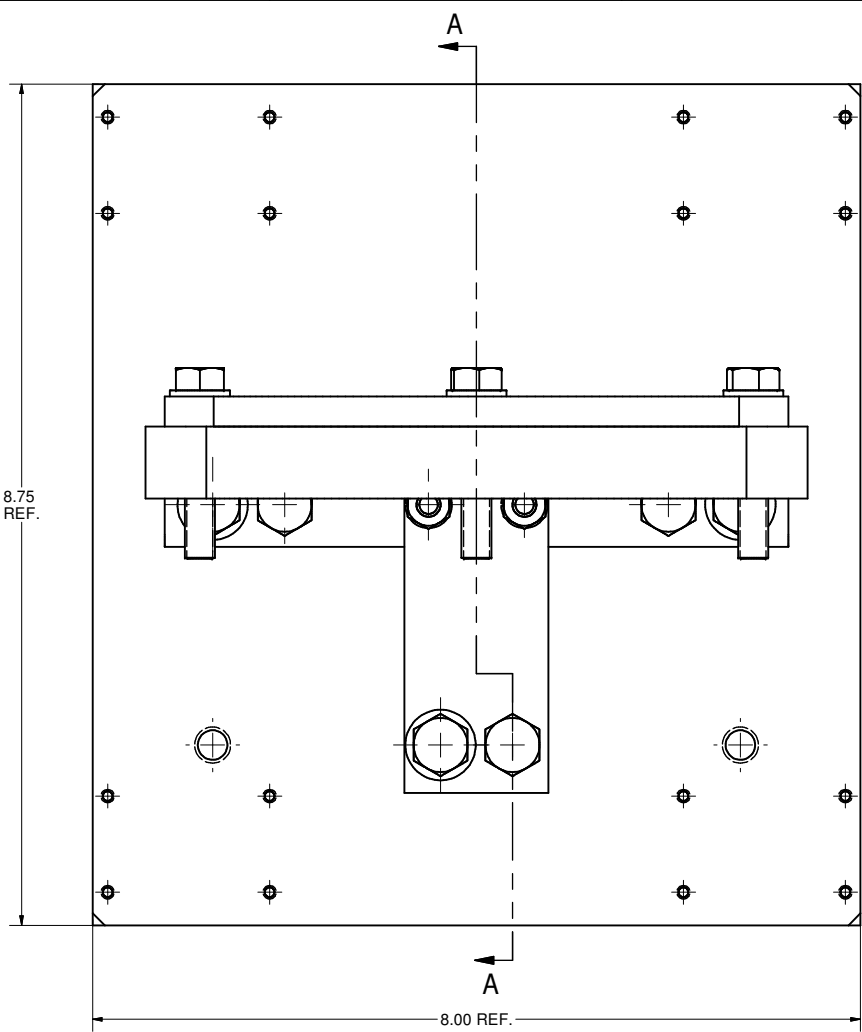
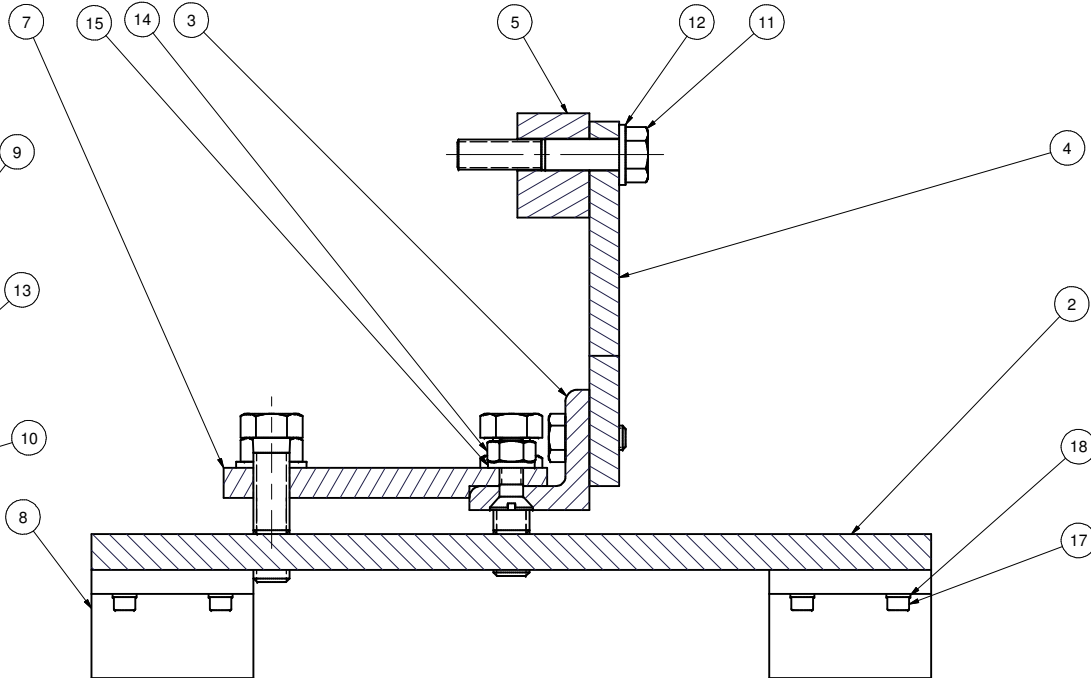
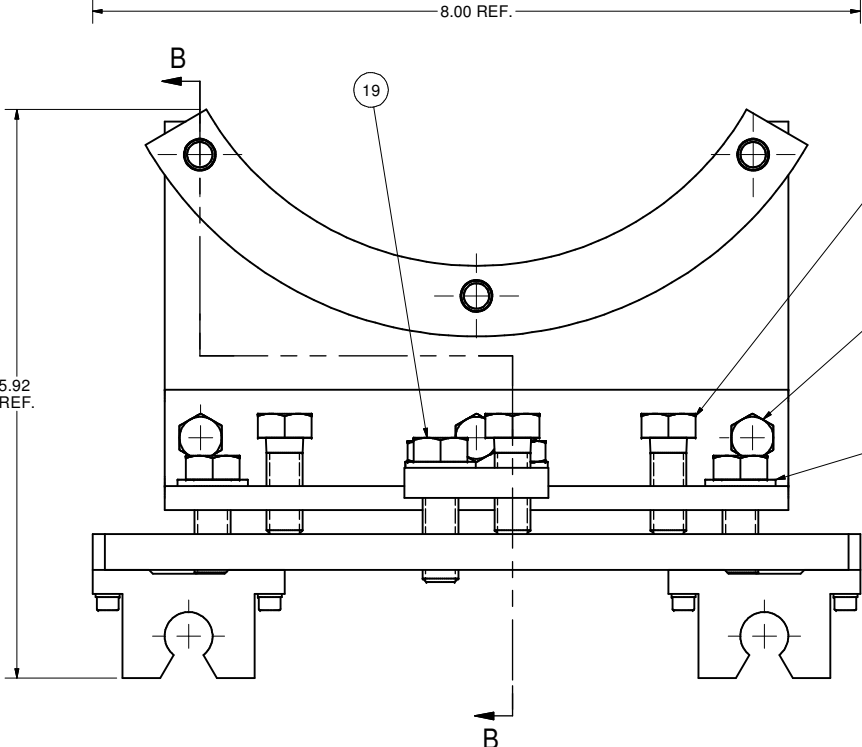
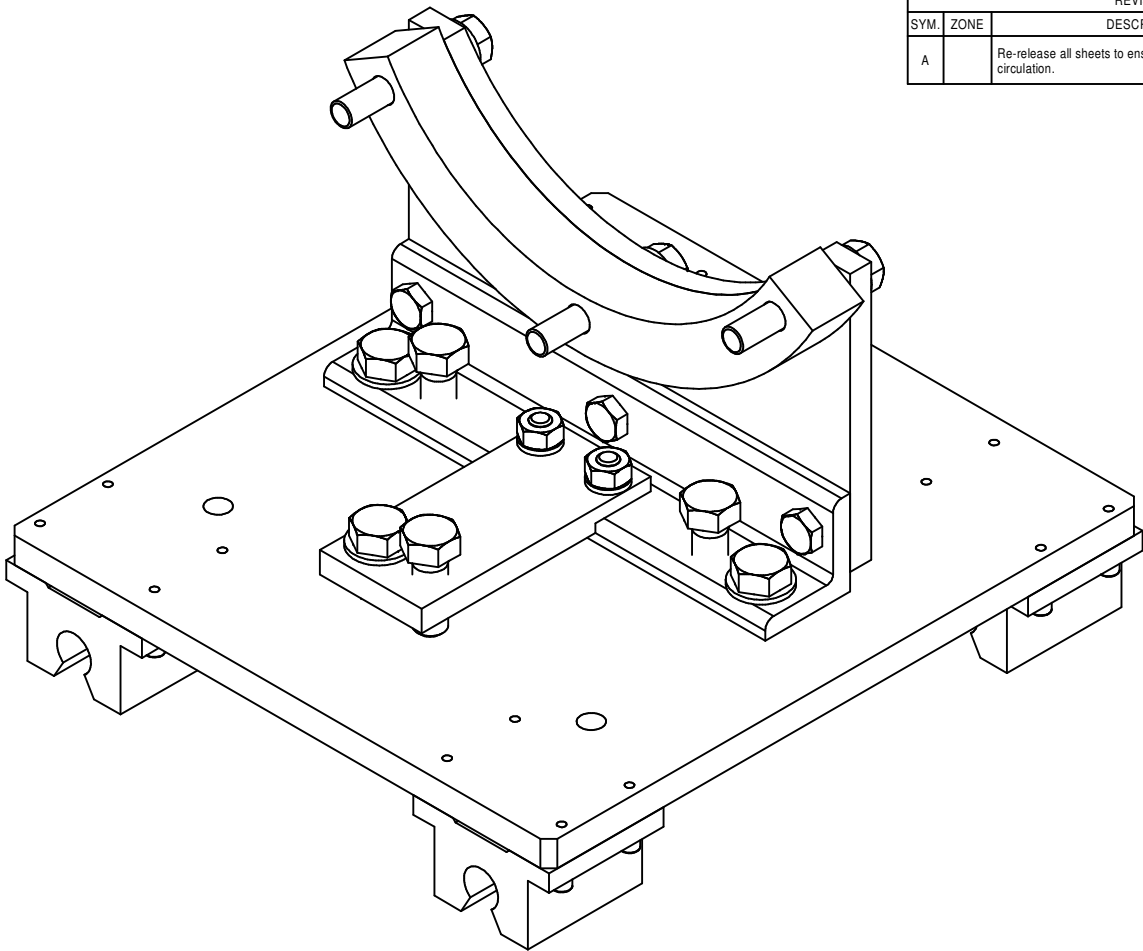


REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO



SECTION A-A



SECTION B-B

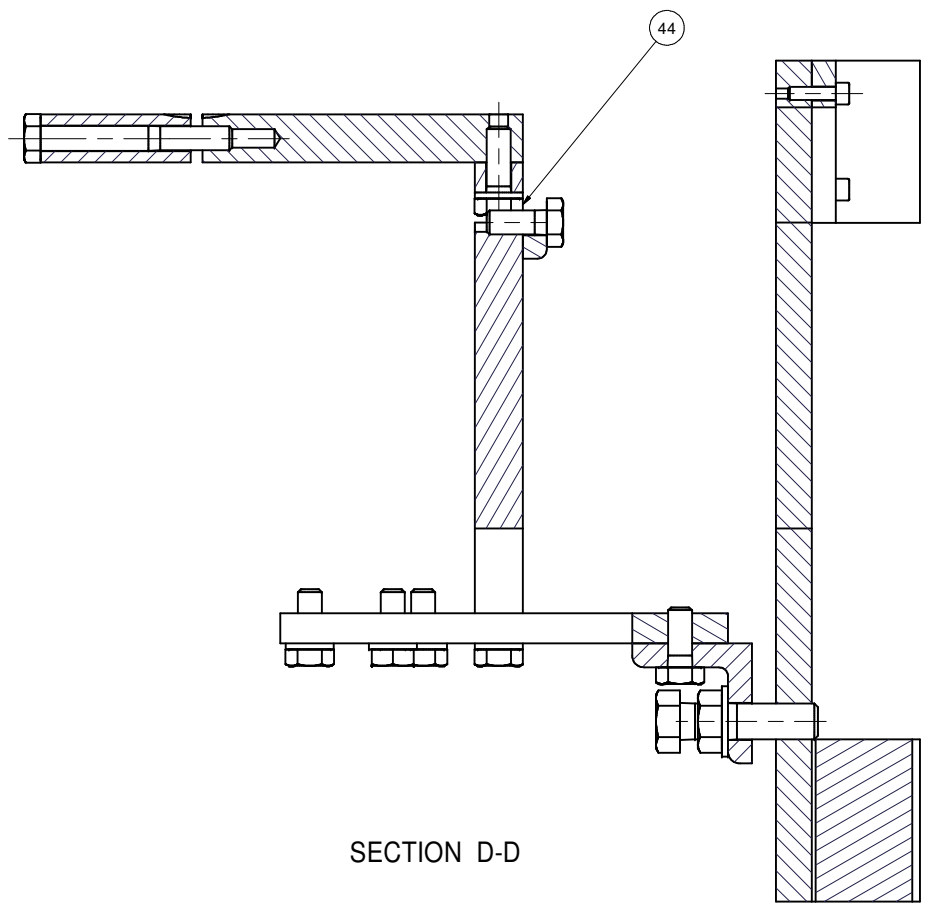
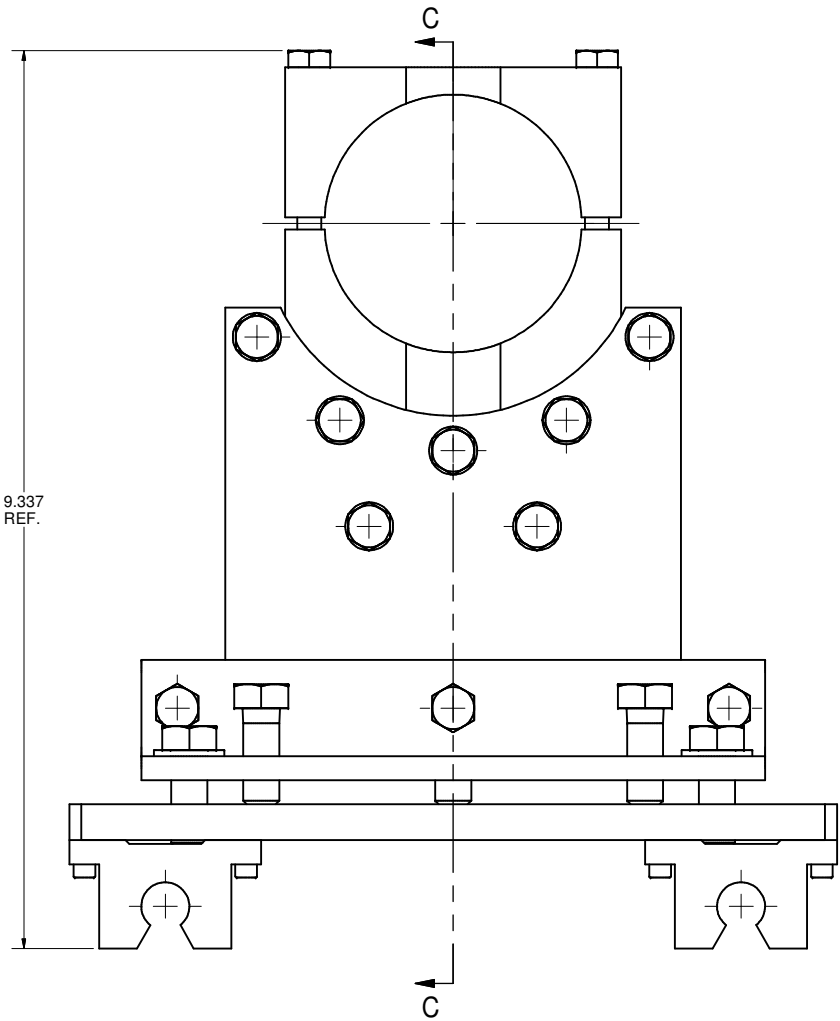
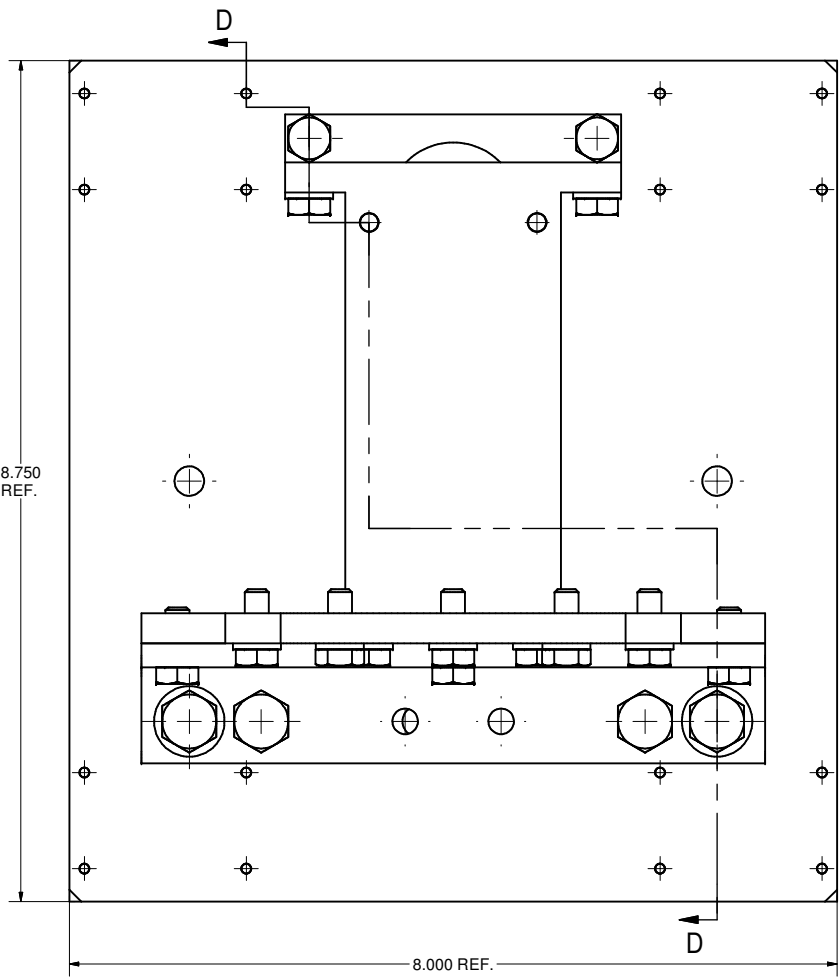
- 1 CARRIAGE FOR "COLD" COUPLER PART, ASSEMBLY
- FILE NAME: 7102-029  
SHEET NO.: 1  
DFT. SCALE: 1:1  
MATERIAL:  
QTY: 1 REQ'D  
NOTES:

FOR MACHINING LUBRICANT USE ONLY  
ALKALINE DETERGENT LUBRICANT CIMSTAR 40  
OR EQUIVALENT APPROVED BY CORNELL LEPP

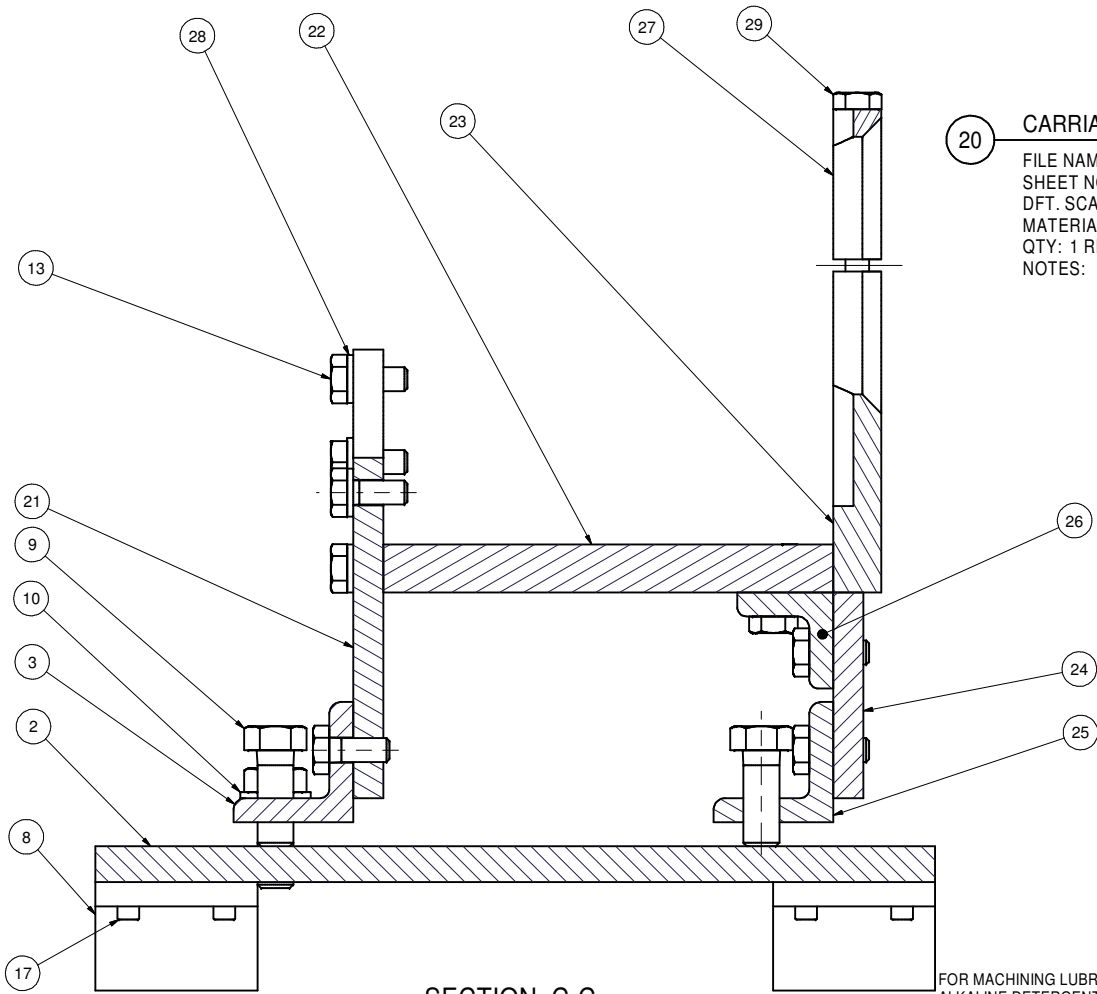
19	PURCHASED	3/8-16 UNC x 1.25 Hex Bolt	1			Stn. Stil.	
18	PURCHASED	No. 6 Helical Spring Lock Washer (Stainless Steel)	16			Stn. Stil.	
17	PURCHASED	No. 6-32 x 1/2 Hexagon Socket Head Cap Screw	16			Stn. Stil.	
16	PURCHASED	1/4-20 UNC x 0.75 Slotted Flat Countersunk Head Cap Screw	2			Stn. Stil.	
15	PURCHASED	1/4 Helical Spring Lock Washer	2			Stn. Stil.	
14	PURCHASED	1/4-20 Hex Nut	2			Stn. Stil.	
13	PURCHASED	1/4-20 UNC x 5/8 Hex Bolt	3			Stn. Stil.	
12	PURCHASED	5/16 Narrow Washer	3			Stn. Stil.	
11	PURCHASED	5/16-24 UNF x 1.75 Hex Bolt	3			Stn. Stil.	
10	PURCHASED	3/8 Narrow Washer	3			Stn. Stil.	
9	PURCHASED	3/8-16 UNC x 1 Hex Bolt	5			Stn. Stil.	
8	PURCHASED	PILLOW BLOCK, REID SUPPLY PBC-90 OR EQUIV.	4				
7	SHEET 6	SUPPORT PLATE 2	1				
5	SHEET 6	SPACER	1				
4	SHEET 6	SUPPORT PLATE 1	1				
3	SHEET 6	ANGLE 1	1				
2	SHEET 6	CARRIAGE BASE PLATE	1				
1	SHEET 1	"COLD" SUPPORT CARRIAGE, ASM	X				

ITEM	DWG. NO.	DESCRIPTION	QUANTITY	REMARKS	REV.
G1	G2	G3			
PRINT DISTR.	7102-029	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES	CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853	CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853
SH. NO. 1 OF 16	7102-029	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES	CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853	CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853
REV. A	7102-029	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES	CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853	CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853
CHECKED BY: VGV	APPROVED BY: VGV	DRAWN BY: VGV	DRAWN FOR: SAB	DATE: 5/4/2006	SCALE: D
7102-029	SH. NO. 1 OF 16	7102-029	SH. NO. 1 OF 16	7102-029	SH. NO. 1 OF 16

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO



SECTION D-D

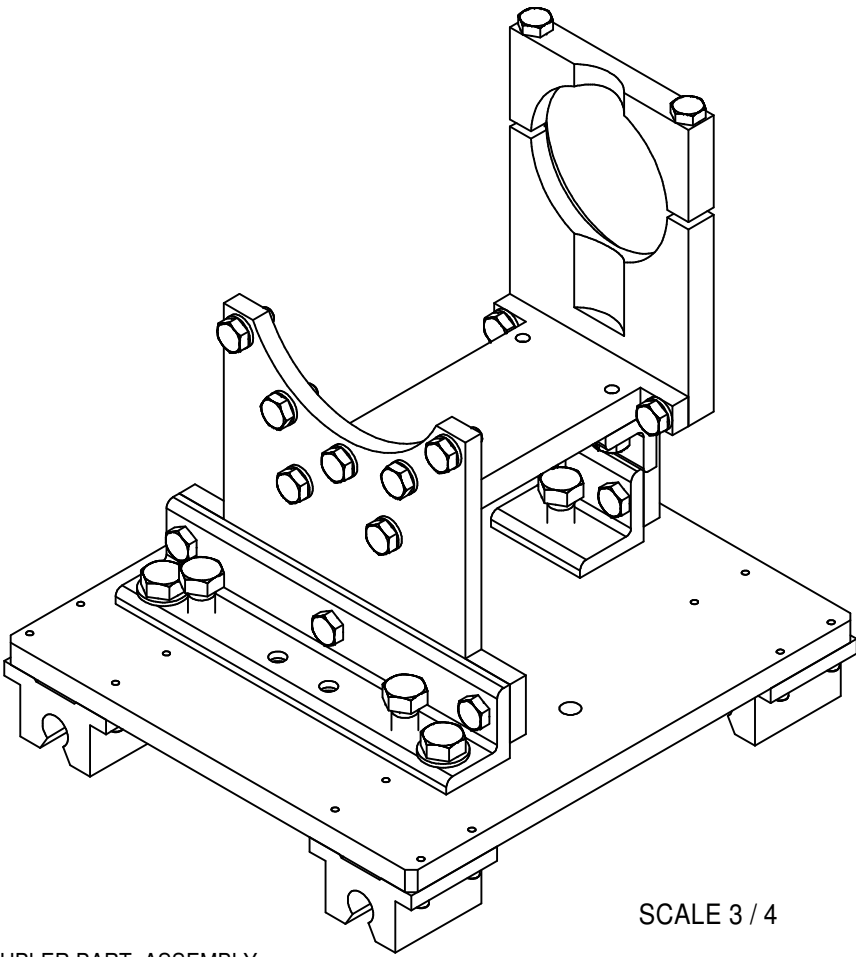


SECTION C-C

20 CARRIAGE FOR "WARM" COUPLER PART, ASSEMBLY





FILE NAME: 7102-029  
SHEET NO.: 2  
DFT. SCALE: 1:1  
MATERIAL:  
QTY: 1 REQ'D  
NOTES:

FOR MACHINING LUBRICANT USE ONLY  
ALKALINE DETERGENT LUBRICANT CIMSTAR 40  
OR EQUIVALENT APPROVED BY CORNELL LEPP

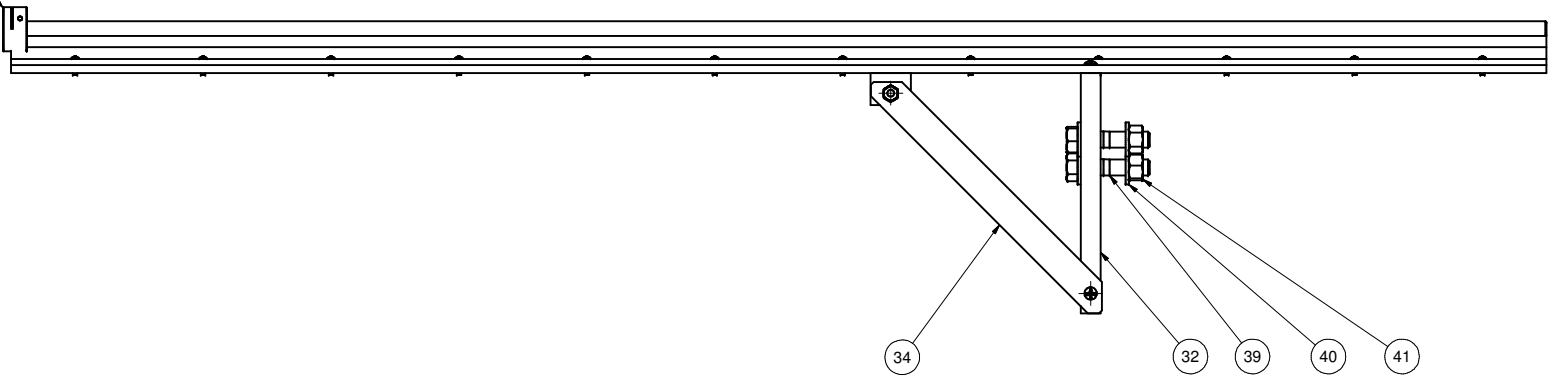
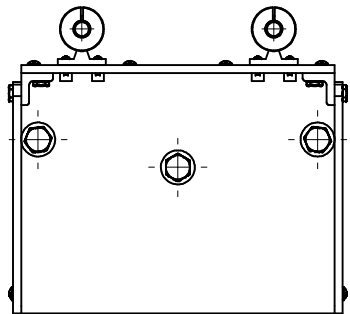
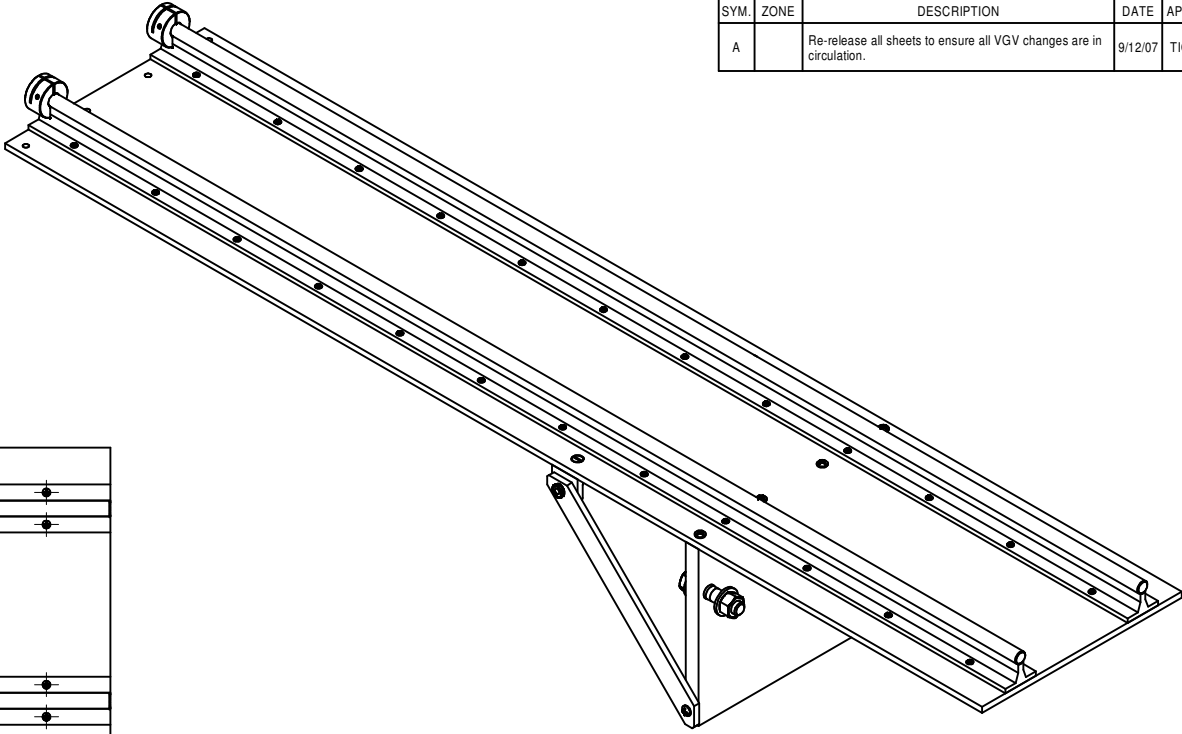
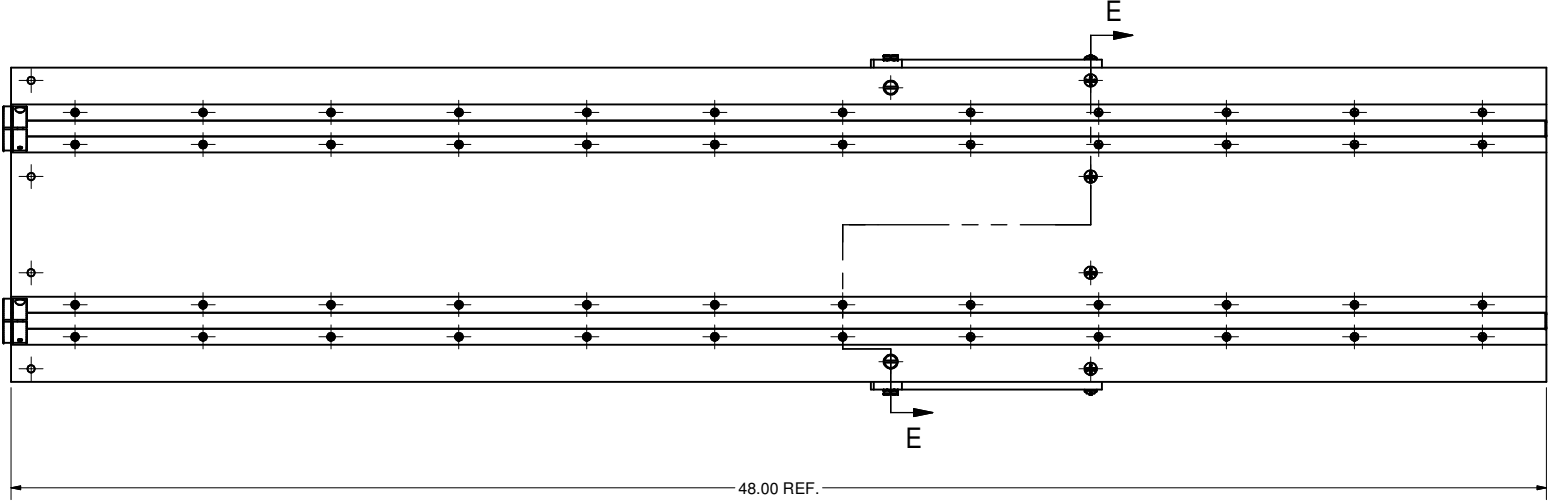
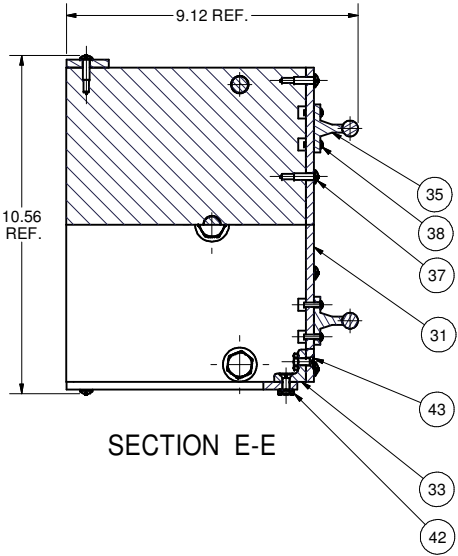


SCALE 3 / 4

44		Hex Bolt (ANSI/ASME B18.2.1 - 1/4-20 UNC - 0.75)	2		PURCHASED	
29		Hex Bolt (ANSI/ASME B18.2.1 - 1/4-20 UNC - 2)	2		PURCHASED	
28		Washer (ASI B18.22.1 - 1/4 - narrow - Type B)	9		PURCHASED	
17		Hexagon Socket Head Cap Screw (ANSI B18.3 - No. 6 - 32 - 1/2)	16		PURCHASED	
13		Hex Bolt (ANSI/ASME B18.2.1 - 1/4-20 UNC - 0.625)	16		PURCHASED	
10		Washer (ANSI B18.22.1 - 3/8 - narrow - Type B)	2		PURCHASED	
9		Hex Bolt (ANSI/ASME B18.2.1 - 3/8-16 UNC - 1)	5		PURCHASED	
8		PILLOW BLOCK, REID SUPPLY PBC-90 OR EQUIV.	4		PURCHASED	
27	SHEET 7	CLAMP 2	1			
26	SHEET 7	ANGLE 3	1			
25	SHEET 7	ANGLE 2	1			
24	SHEET 8	SUPPORT PLATE 5	1			
23	SHEET 7	SUPPORT PLATE 4	1			
22	SHEET 7	BRACE	1			
21	SHEET 7	SUPPORT PLATE 3	1			
3	SHEET 6	ANGLE 1	1			
2	SHEET 6	CARRIAGE BASE PLATE	1			
20	SHEET 2	"WARM" SUPPORT CARRIAGE, ASM	X			

 		ITEM		DWG. NO.		DESCRIPTION		G1		G2		G3		REMARKS		REV.			
								QUANTITY											
D		PRINT DISTR.		PLOT DATE: 9/19/2007 CAD FILE NAME: 7102-029.idw															
7102-029 SH. NO. 2 OF 16		CR-1		UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN INCHES:  TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 		<div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div></div> <div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div>													
				COUPLER ASSEMBLING FIXTURES CARRIAGE FOR "WARM" COUPLER PART, ASSEMBLY															
A		REV.		CHECKED BY: VGV		DRAWN BY VG V		DRAWN FOR SAB		DATE 5/4/2006		SCALE		D		7102-029 SH. NO. 2 OF 16		REV. A	
				APPROVED BY: VGV															

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO



30 RAIL TRACK 1, ASSEMBLY  
FILE NAME: 7102-029  
SHEET NO.: 3  
DFT. SCALE: 1:3  
MATERIAL:  
QTY: 1 REQ'D  
NOTES:

43		Slotted Flat Countersunk Head Machine Screw (ANSI B18.6.3 - 12-24 x 5/8)	4			PURCHASED	
42		Hex Machine Screw Nut (ANSI B18.6.3 - 12 - 24)	4			PURCHASED	
41		Hex Nut (ANSI B18.2.2 - 1/2 - 13)	3			PURCHASED	
40		Washer (ANSI B18.22.1 - 1/2 - narrow - Type A)	6			PURCHASED	
39		Hex Bolt (ANSI/ASME B18.2.1 - 1/2-13 UNC - 2.25)	3			PURCHASED	
38		Cross Recessed Fillister Head Machine Screw - Type II (ANSI B18.6.3 - No. 6 - 32 - 1/2)	48			PURCHASED	
37		Cross Recessed Fillister Head Machine Screw - Type II (ANSI B18.6.3 - No. 12 - 24 - 5/8)	6			PURCHASED	
36		END-STOP CLAMP-ON COLLAR, McMASTER-CARR #5375K11 OR EQUIV.	2			PURCHASED	
35		SHAFT RAIL, McMASTER-CARR #6557K31 OR EQUIV.	2			PURCHASED	
34	SHEET 8	ARM 1	2				
33	SHEET 8	ANGLE 4	2				
32	SHEET 8	RAIL SUPPORT PLATE 1	1				
31	SHEET 8	RAIL SUPPORT PLATE 2	1				
30	SHEET 3	RAIL TRACK 1, ASM	X				

D

PRINT  
DISTR.

7102-029

SH. NO. 3 OF 16

REV. A

CR-1

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES:  
TOLERANCES ON:  
.00 ± .010  
.000 ± .005  
FRACTIONS ± 1/64  
ANGLES ± 0.5°  
ALL SURFACES

**LEPP**

LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS

CORNELL UNIVERSITY

Floyd R. Newman Laboratory

Ithaca, NY 14853

COUPLER ASSEMBLING FIXTURES

RAIL TRACK 1, ASSEMBLY

CHECKED BY: VGV

APPROVED BY: VGV

DRAWN BY: VGV

DRAWN FOR: SAB

DATE: 5/4/2006

SCALE: D

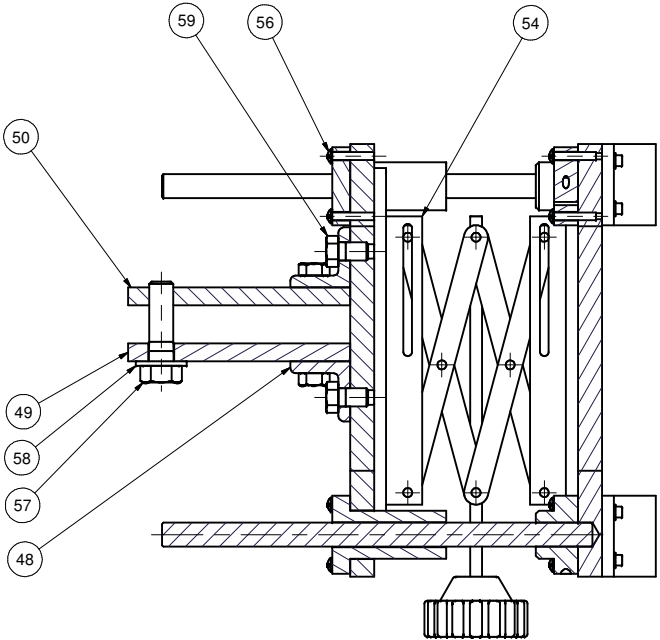
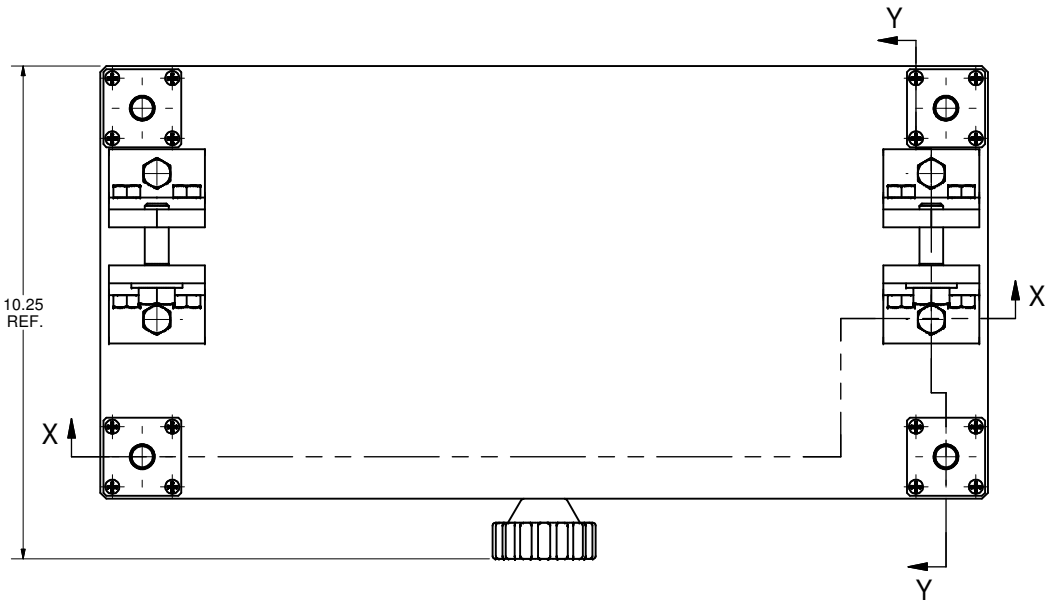
7102-029

SH. NO. 3 OF 16

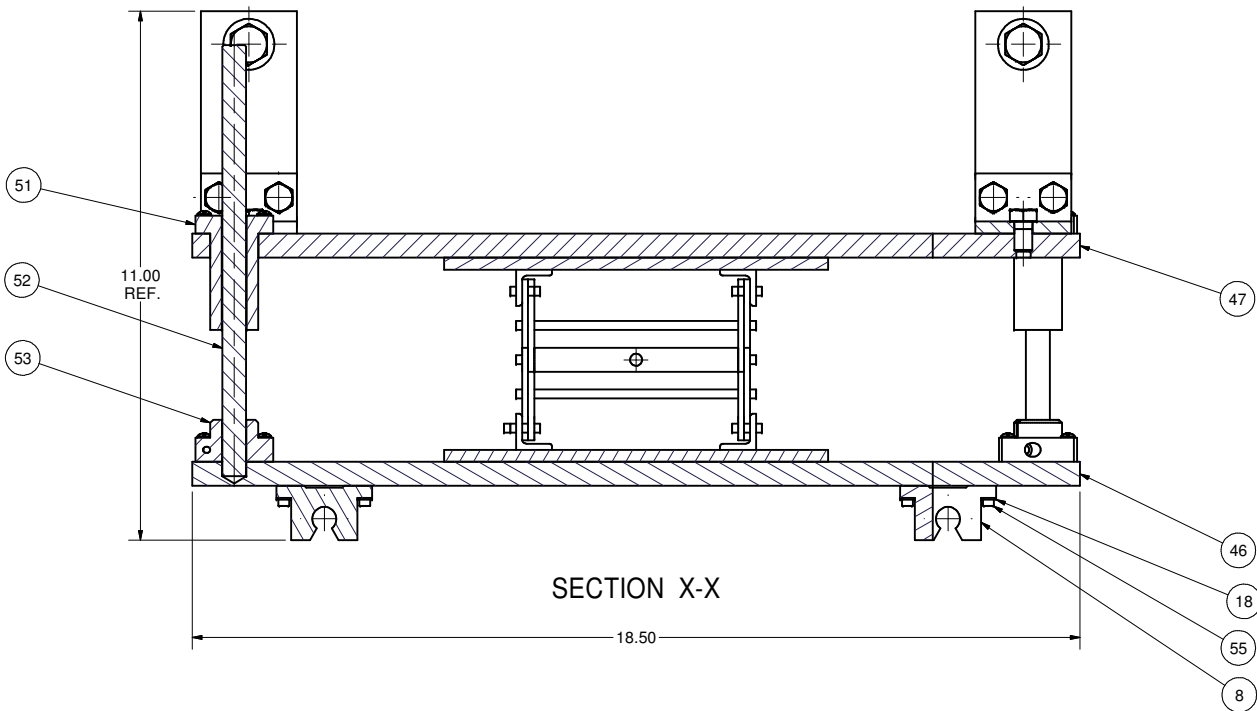
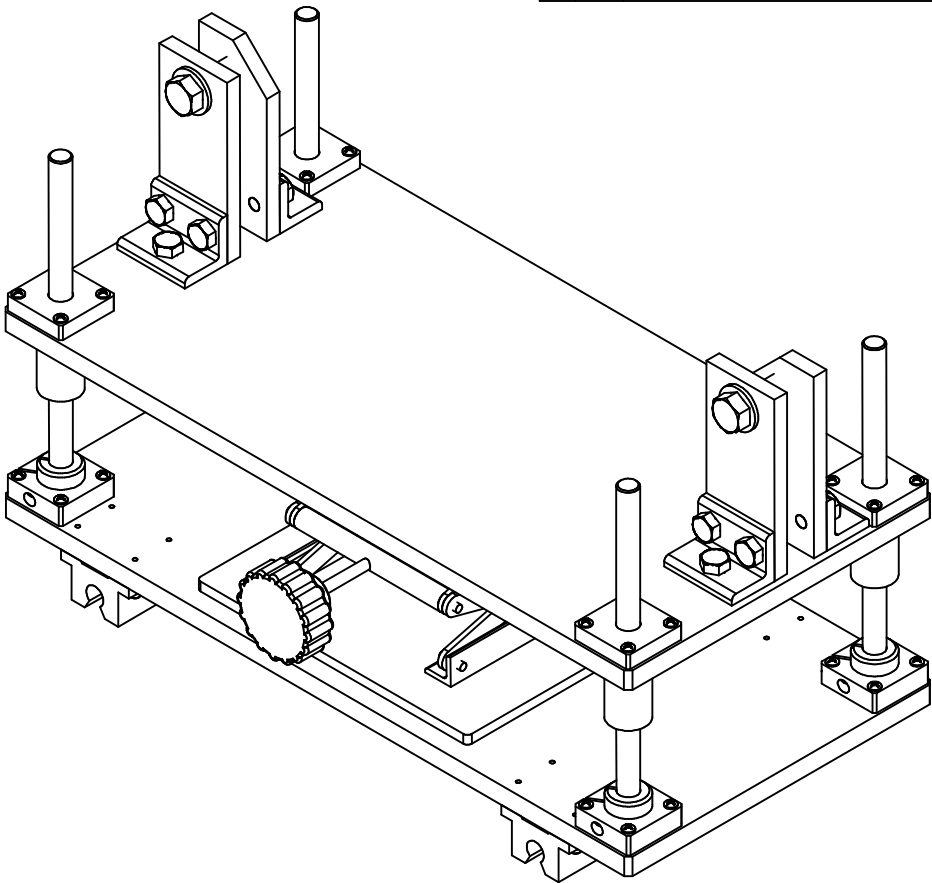
REV. A

FOR MACHINING LUBRICANT USE ONLY  
ALKALINE DETERGENT LUBRICANT CIMSTAR 40  
OR EQUIVALENT APPROVED BY CORNELL LEPP

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO





SECTION Y-Y



SECTION X-X

**45 CARRIAGE FOR BIG CRYOSTAT FLANGE, ASSEMBLY**  
FILE NAME: 7102-029  
SHEET NO.: 4  
DFT. SCALE: 1:2  
MATERIAL:  
QTY: 1 REQ'D  
NOTES:

59		Hex Bolt (ANSI/ASME B18.2.1 - 3/8-16 UNC - 0.625)	12			PURCHASED	
58		Washer (ANSI B18.22.1 - 1/2 - narrow - Type A)	2			PURCHASED	
57		Hex Bolt (ANSI/ASME B18.2.1 - 1/2-13 UNC - 1.75)	2			PURCHASED	
56		Cross Recessed Fillister Head Machine Screw - Type II (ANSI B18.6.3 - No. 8 - 32 - 7/8)	32			PURCHASED	
18		Helical Spring Lock Washer(ASME B18.21.1-No. 6 Regular, Stainless Steel)	16			PURCHASED	
55		Hexagon Socket Head Cap Screw (ANSI B18.3 - No. 6 - 32 - 5/8)	16			PURCHASED	
54		SCISSOR JACK, 200 LB CAPACITY, SCIENLAB 10-9004 OR EQUIV.	1			PURCHASED	
53		FLANGED SUPPORT BLOCK, REID SUPPLY TLM-2020 OR EQUIV.	4			PURCHASED	
8		PILLOW BLOCK, REID SUPPLY PBC-90 OR EQUIV.	4			PURCHASED	
52	SHEET 10	VERTICAL SHAFT	4				
51	SHEET 9	SHAFT FLANGED BEARING	4				
50	SHEET 9	FLANGE CARRIAGE BRACE 2	2				
49	SHEET 9	FLANGE CARRIAGE BRACE 1	2				
48	SHEET 9	ANGLE 5	4				
47	SHEET 9	FLANGE CARRIAGE PLATE	1				
46	SHEET 9	FLANGE CARRIAGE BASE	1				
45	SHEET 4	FLANGE CARRIAGE, ASSEMBLY	X				

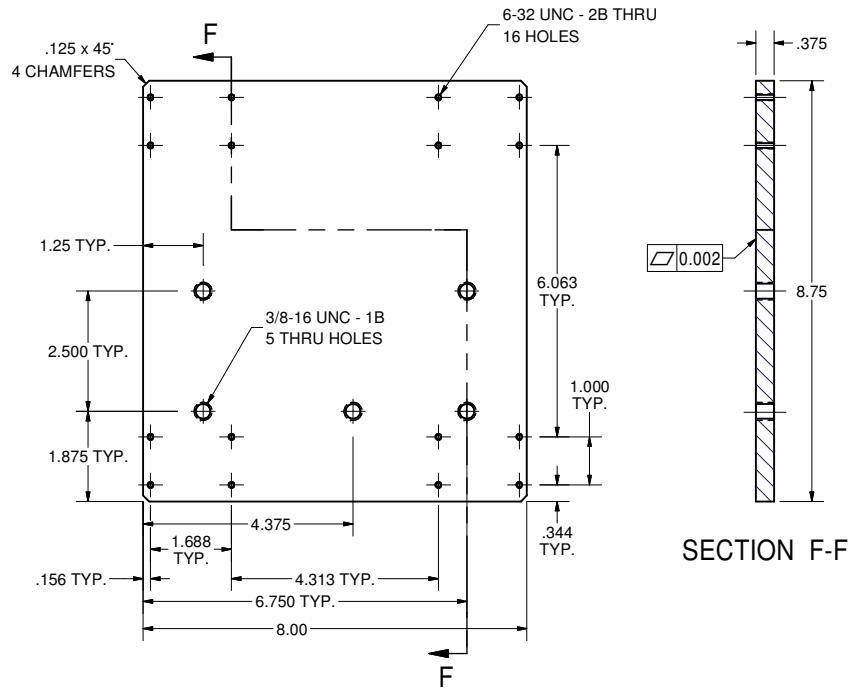
		ITEM		DWG. NO.		DESCRIPTION		G1	G2	G3	REMARKS		REV.	
								QUANTITY						
D		PRINT DISTR.		PLOT DATE: 9/19/2007 CAD FILE NAME: 7102-029.idw										
7102-029 SH NO. 4 OF 16		CR-1		UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		 CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY Ithaca, NY 14853  LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS								
				COUPLER ASSEMBLING FIXTURES  CARRIAGE FOR BIG CRYOSTAT FLANGE, ASSEMBLY										
REV. A		CHECKED BY: VGV		DRAWN BY: VGV		DRAWN FOR: SAB		DATE: 5/4/2006		SCALE: D		7102-029 SH. NO. 4 OF 16		REV. A
		APPROVED BY: VGV												

FOR MACHINING LUBRICANT USE ONLY  
ALKALINE DETERGENT LUBRICANT CIMSTAR 40  
OR EQUIVALENT APPROVED BY CORNELL LEPP



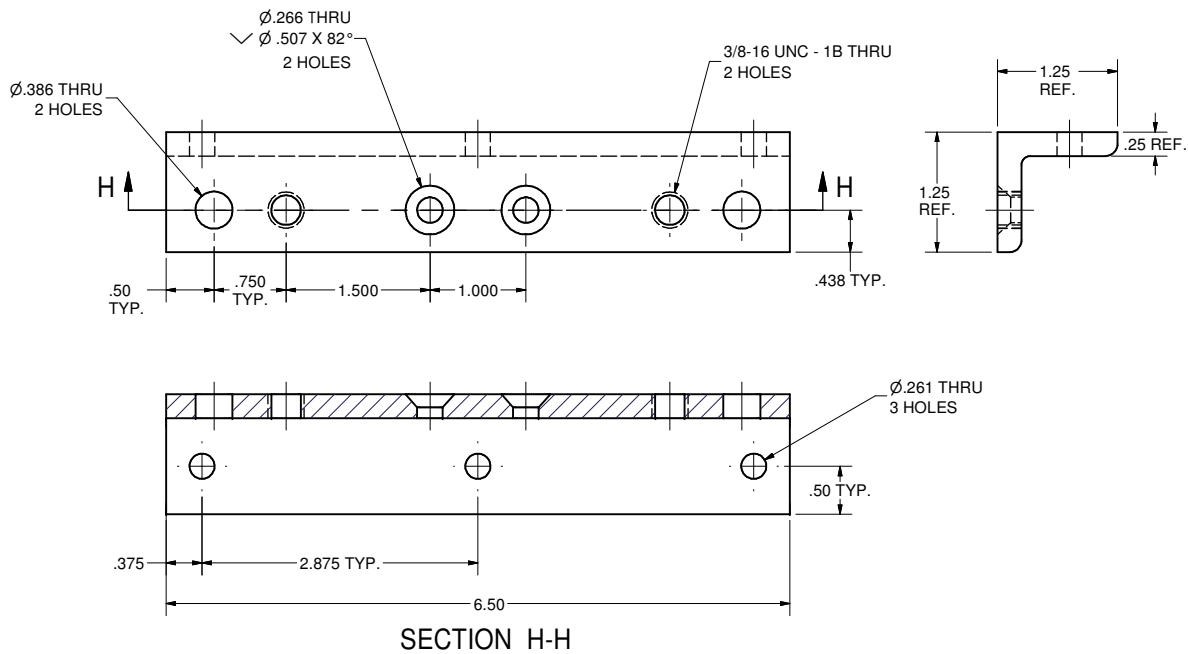


REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	E2	Added Hole Sizes to Part #4 SX	6/5/06	TIO
B		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO



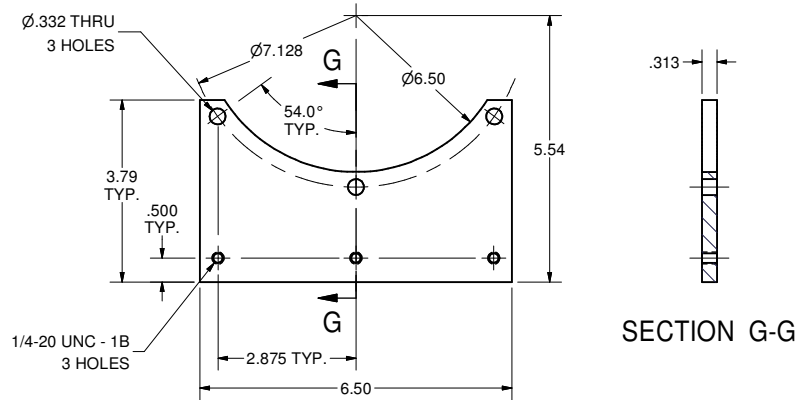
2 CARRIAGE BASE PLATE  
FILE NAME: 7102-029  
SHEET NO.: 6  
DFT. SCALE: 1:2  
MATERIAL: ALUMINUM  
QTY: 1 FOR ASSEMBLY  
NOTES:

SECTION F-F



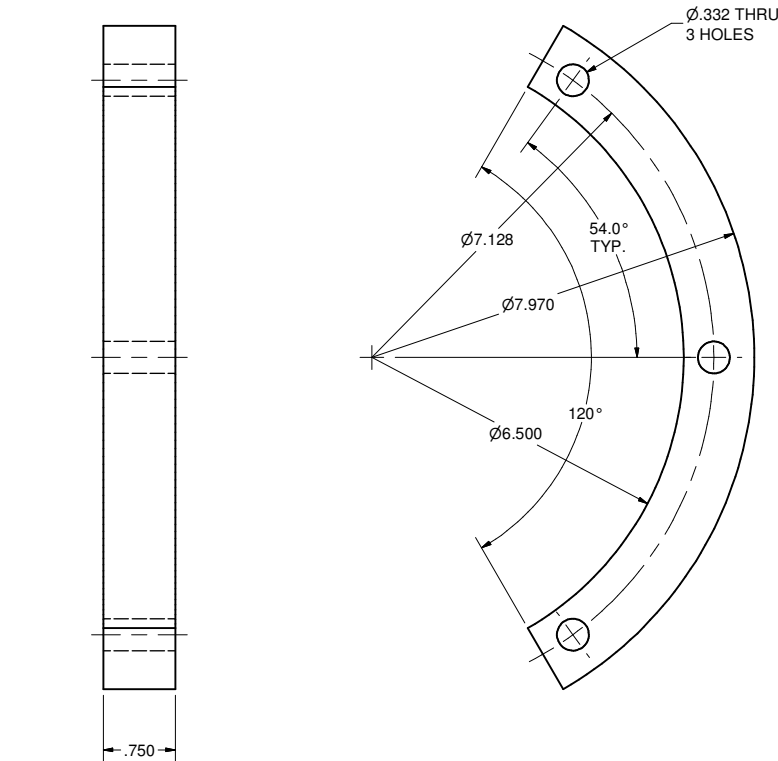
3 ANGLE 1  
FILE NAME: 7102-029  
SHEET NO.: 6  
DFT. SCALE: 1:1  
MATERIAL: ALUMINUM ANGLE 1.250 x 1.250 x .250  
QTY: 1 FOR ASSEMBLY  
NOTES:

SECTION H-H

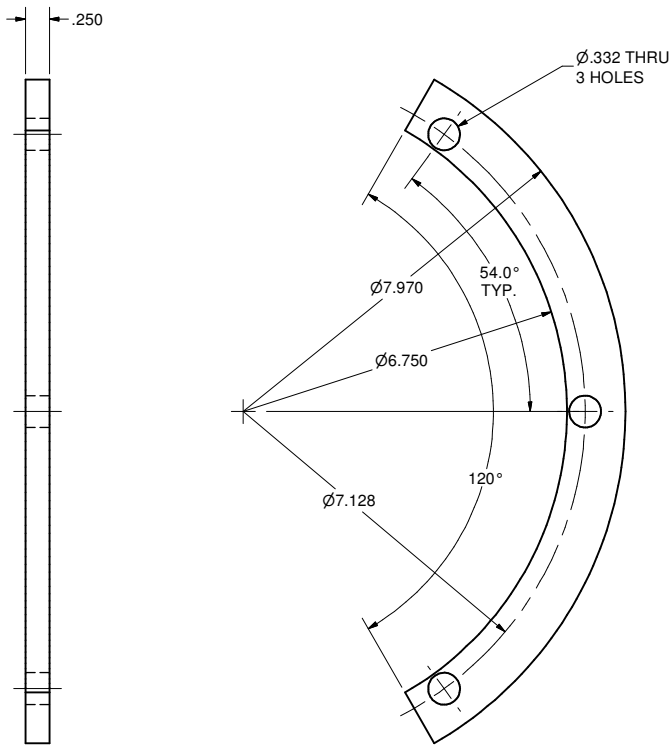


4 SUPPORT PLATE 1  
FILE NAME: 7102-029  
SHEET NO.: 6  
DFT. SCALE: 1:2  
MATERIAL: ALUMINUM  
QTY: 1 FOR ASSEMBLY  
NOTES:

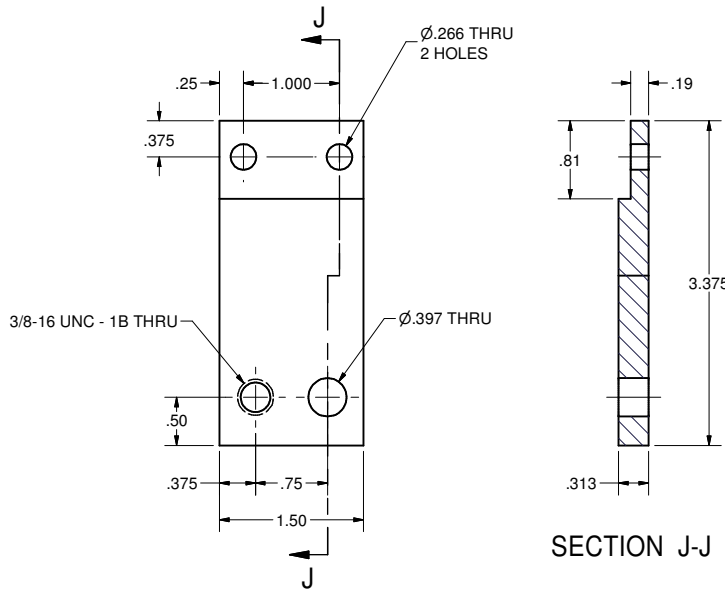
SECTION G-G



5 SPACER  
FILE NAME: 7102-029  
SHEET NO.: 6  
DFT. SCALE: 1:1  
MATERIAL: ALUMINUM  
QTY: 1 FOR ASSEMBLY  
NOTES:






6 CLAMP 1  
FILE NAME: 7102-029  
SHEET NO.: 6  
DFT. SCALE: 1:1  
MATERIAL: ALUMINUM  
QTY: 1 FOR ASSEMBLY  
NOTES:



7 SUPPORT PLATE 2  
FILE NAME: 7102-029  
SHEET NO.: 6  
DFT. SCALE: 1:1  
MATERIAL: ALUMINUM  
QTY: 1 FOR ASSEMBLY  
NOTES:

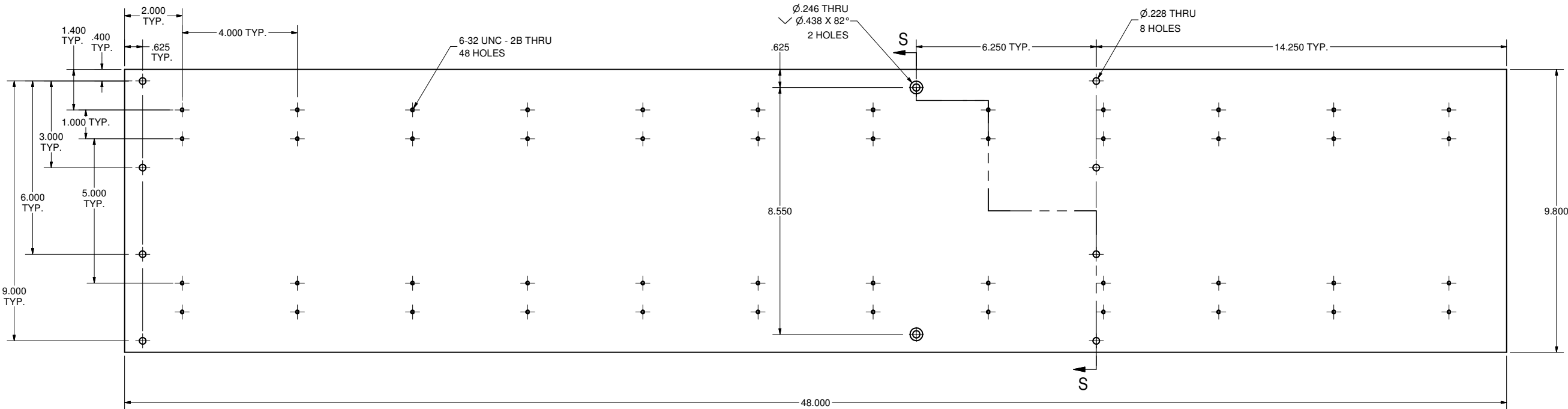
SECTION J-J

FOR MACHINING LUBRICANT USE ONLY  
ALKALINE DETERGENT LUBRICANT CIMSTAR 40  
OR EQUIVALENT APPROVED BY CORNELL LEPP

	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
							QUANTITY			
	PRINT DISTR.	PLOT DATE: 9/19/2007 CAD FILE NAME: 7102-029.idw								
	7102-029 SH. NO. 6 OF 16	CR-1	UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN INCHES:  TOLERANCES ON:  .000 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓	CORNELL UNIVERSITY  Floyd R. Newman Laboratory Ithaca, NY 14853  LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS						
REV. B		CHECKED BY: VGV  APPROVED BY: VGV	DRAWN BY VGV	DRAWN FOR SAB	DATE 5/4/2006	SCALE	D	7102-029 SH. NO. 6 OF 16		REV. B

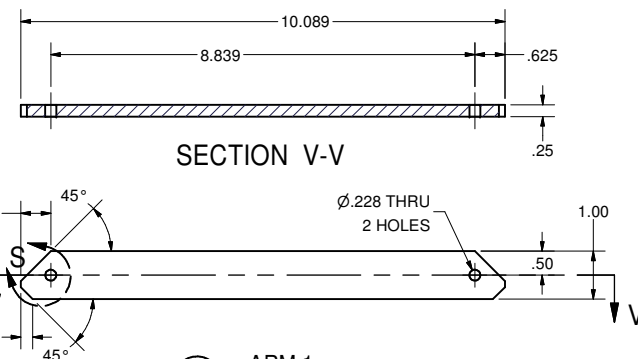
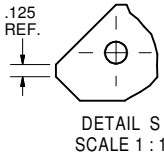
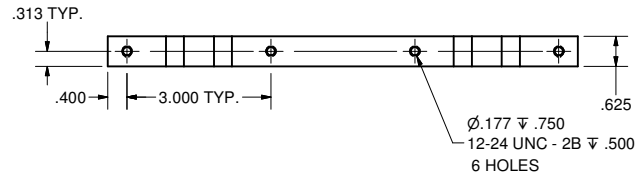


REVISIONS					
SYM.	ZONE	DESCRIPTION		DATE	APP.
A	A6	Added Hole Sizes to Part #24	SX	6/5/06	TIO
B		Re-release all sheets to ensure all VGV changes are in circulation.		9/12/07	TIO

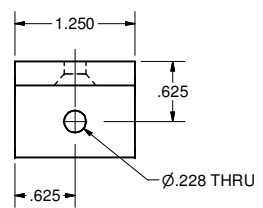


SECTION S-S

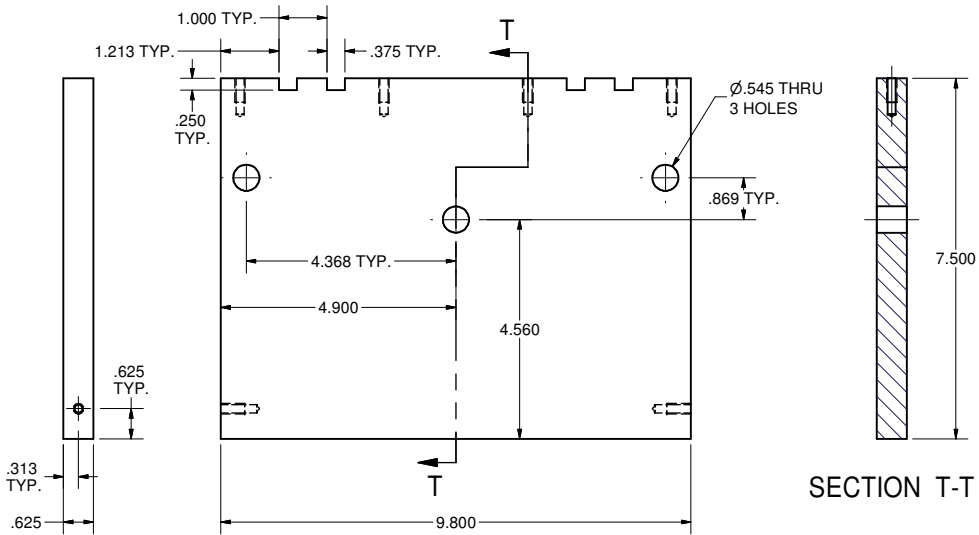
31 RAIL SUPPORT PLATE 2  
FILE NAME: 7102-029  
SHEET NO.: 8  
DFT. SCALE: 1:2  
MATERIAL: ALUMINUM  
QTY: 1 FOR ASSEMBLY  
NOTES:



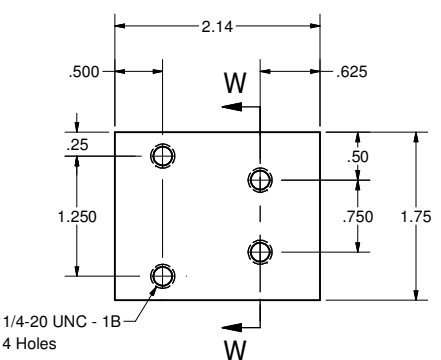
34 ARM 1  
FILE NAME: 7102-029  
SHEET NO.: 8  
DFT. SCALE: 1:2  
MATERIAL: ALUMINUM  
QTY: 2 FOR ASSEMBLY  
NOTES:



33 ANGLE 4  
FILE NAME: 7102-029  
SHEET NO.: 8  
DFT. SCALE: 1:1  
MATERIAL: ALUMINUM ANGLE 1.000 x 1.000 x .250  
QTY: 2 FOR ASSEMBLY  
NOTES:





SECTION T-T



24 SUPPORT PLATE 5  
FILE NAME: 7102-029  
SHEET NO.: 8  
DFT. SCALE: 1:1  
MATERIAL: ALUMINUM  
QTY: 1 FOR ASSEMBLY  
NOTES:

32 RAIL SUPPORT PLATE 1  
FILE NAME: 7102-029  
SHEET NO.: 8  
DFT. SCALE: 1:2  
MATERIAL: ALUMINUM  
QTY: 1 FOR ASSEMBLY  
NOTES:

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OR EQUIVALENT APPROVED BY CORNELL LEPP

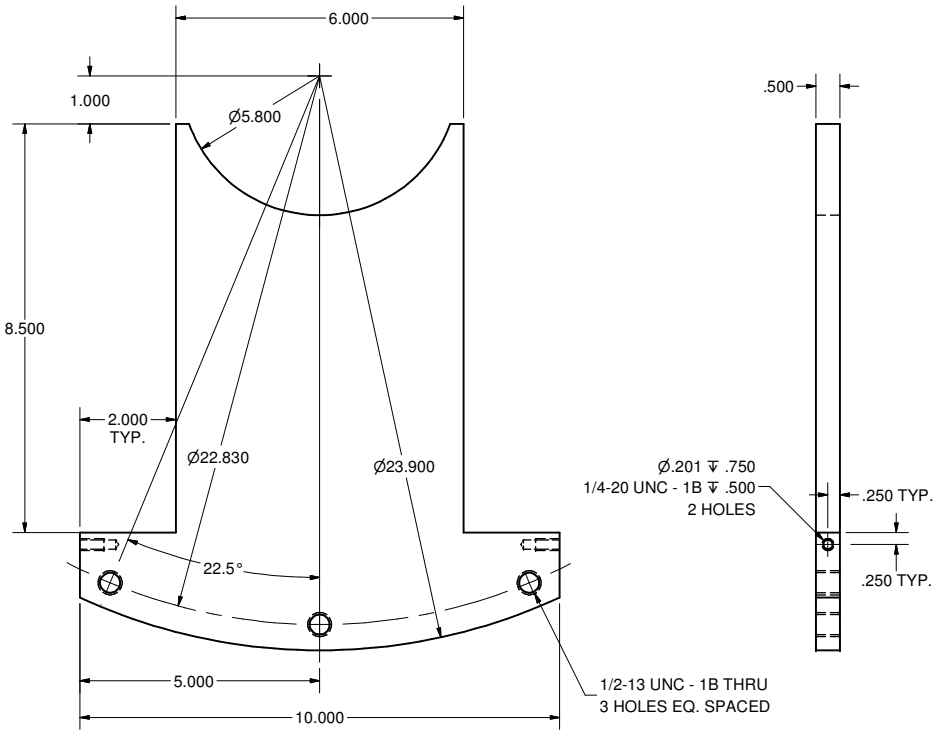
	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
							QUANTITY			
D	PRINT DISTR.	PLOT DATE: 9/19/2007 CAD FILE NAME: 7102-029.idw								
	7102-029 SH. NO. 8 OF 16	CR-1	UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓	<div>CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853</div> <div> LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div> <div>COUPLER ASSEMBLING FIXTURES DETAILS OF RAIL TRACK 1</div>						
CHECKED BY: VGV				DRAWN BY: VGV	DRAWN FOR: SAB	DATE: 5/4/2006	SCALE: D	7102-029 SH. NO. 8 OF 16	REV. B	
B				REV.	APPROVED BY: VGV					





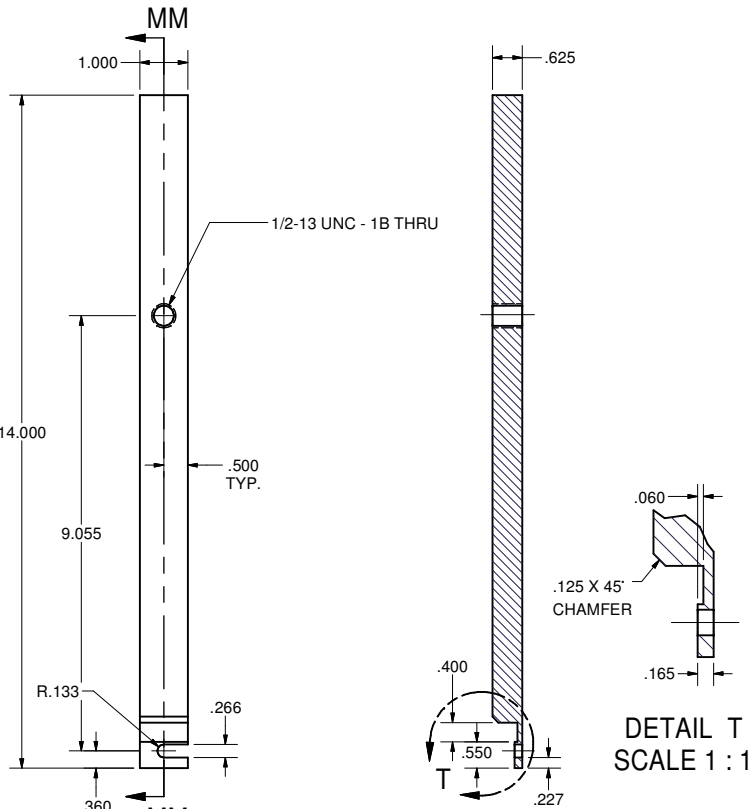


REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Added Taper Dimensions to Parts 69, 70, and 71	SX 6/6/06	TIO
B		Added new sheets	1/9/07	TIO
C		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO



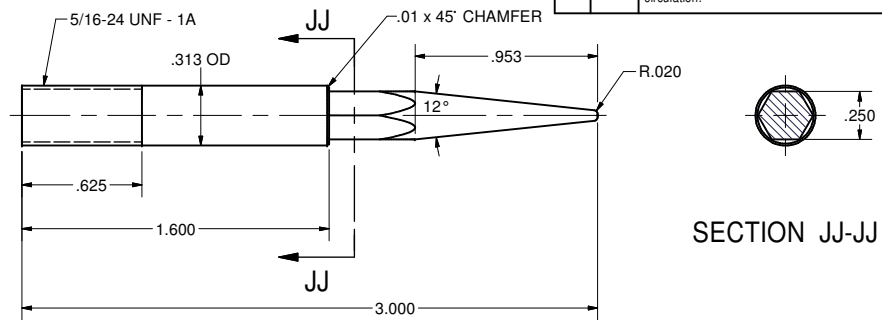
67 COUPLER SUPPORT

FILE NAME: 7102-029  
SHEET NO.: 11  
DFT. SCALE: 1:2  
MATERIAL: ALUMINUM  
QTY: 1 REQ'D  
NOTES:



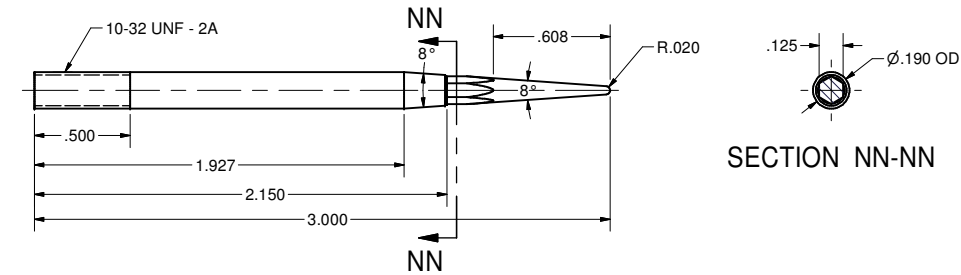
68 COUPLER BRACE

FILE NAME: 7102-029  
SHEET NO.: 11  
DFT. SCALE: 1:2  
MATERIAL: ALUMINUM  
QTY: 1 REQ'D  
NOTES:



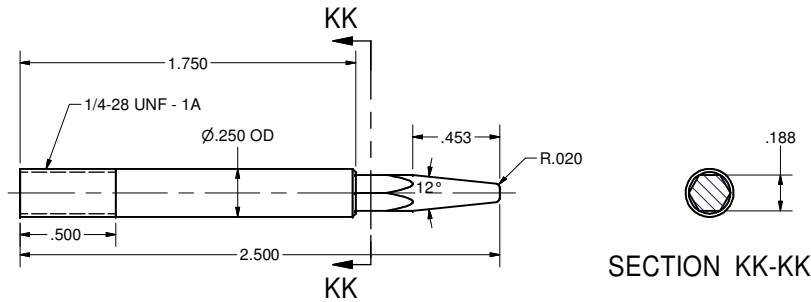
69 GUIDE STUD 1

FILE NAME: 7102-029  
SHEET NO.: 11  
DFT. SCALE: 2:1  
MATERIAL: STN. STL.  
QTY: 4 REQ'D  
NOTES:



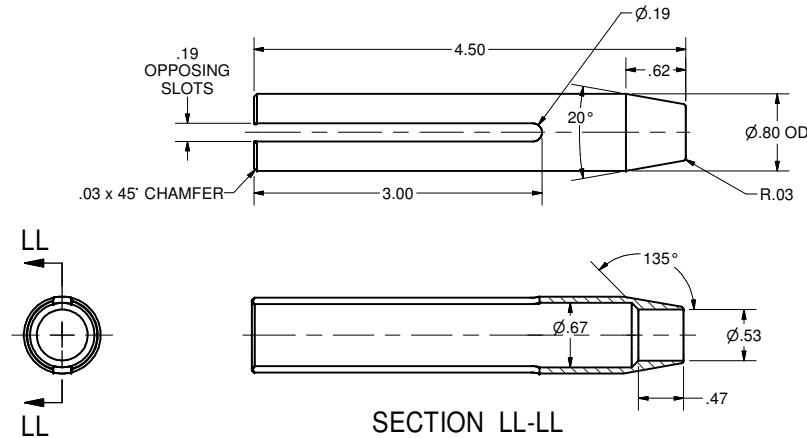
70 GUIDE STUD 2

FILE NAME: 7102-029  
SHEET NO.: 11  
DFT. SCALE: 1:1  
MATERIAL: STN. STL.  
QTY: 2 REQ'D  
NOTES:



71 GUIDE STUD 3




FILE NAME: 7102-029  
SHEET NO.: 11  
DFT. SCALE: 2:1  
MATERIAL: STN. STL.  
QTY: 2 REQ'D  
NOTES:



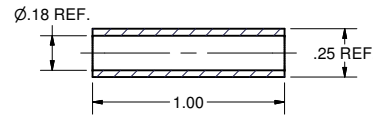
72 SHELL

FILE NAME: 7102-029  
SHEET NO.: 11  
DFT. SCALE: 1:1  
MATERIAL: ALUMINUM  
QTY: 1 REQ'D  
NOTES:

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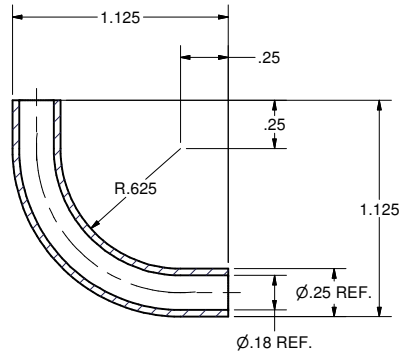
	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
				QUANTITY				
	PRINT DISTR.	PLOT DATE: 9/19/2007 CAD FILE NAME: 7102-029.idw						
	CR-1	UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓		<div>CORNELL UNIVERSITY LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div> <div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div>				
SH. NO. 11 OF 16	7102-029	COUPLER ASSEMBLING FIXTURES DETAILS						
		CHECKED BY: VGV	DRAWN BY VGV	DRAWN FOR SAB	DATE 5/4/2006	SCALE		7102-029
REV. C	APPROVED BY: VGV	SH. NO. 11 OF 16						

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO
B		ADDED MACHINING NOTE TO ITEM 82. TMK	9/19/07	TIO



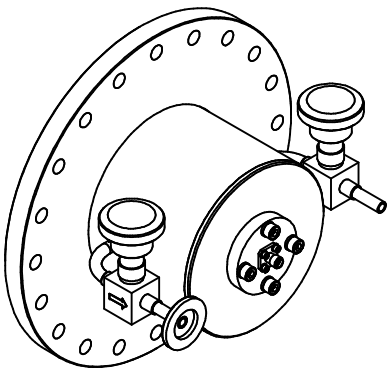
**85** 1/4" PIPE FOR UP-TO-AIR VALVE

FILE NAME: 7102-029  
SHEET NO.: 12  
DFT. SCALE: 2:1  
MATERIAL: STN. STL. (.25" x .035" TUBING)  
QTY: 2 PER ASM.  
NOTES:

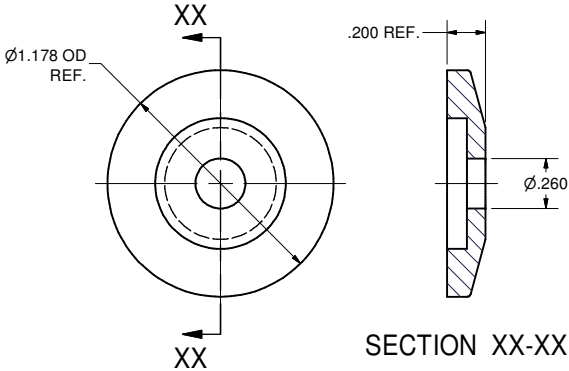


**84** 90° ELBOW PIPE FOR UP-TO-AIR VALVE

FILE NAME: 7102-029  
SHEET NO.: 12  
DFT. SCALE: 2:1  
MATERIAL: STN. STL. (.25" x .035" TUBING)  
QTY: 2 PER ASM.  
NOTES:



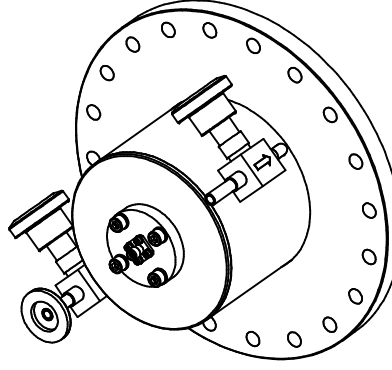
SCALE 1 : 2



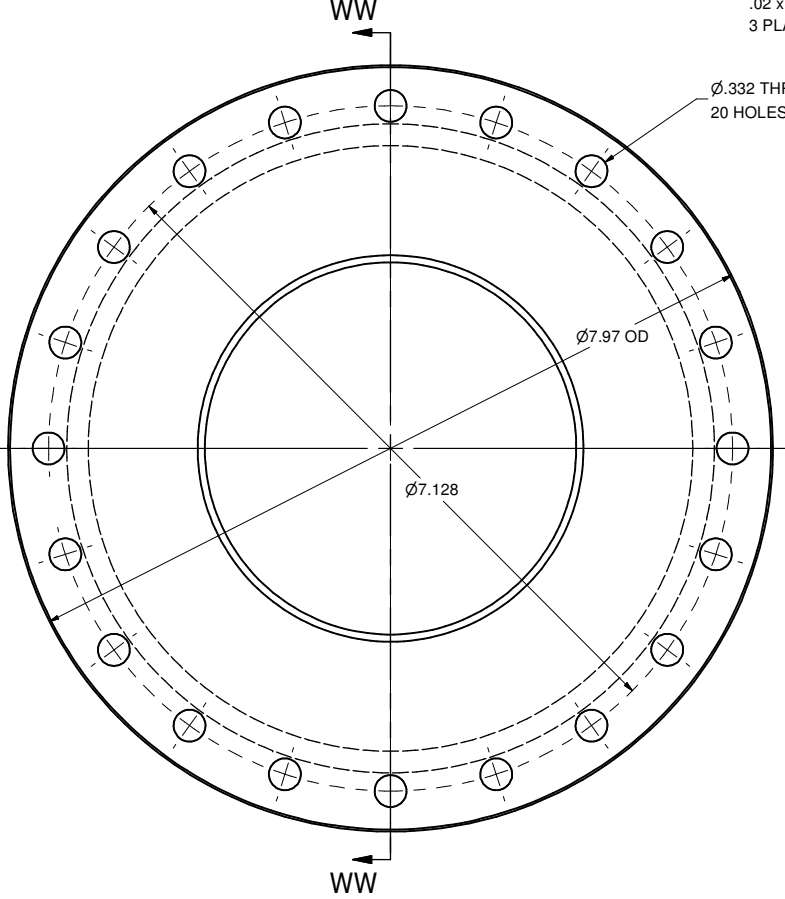
SECTION XX-XX

**86** NW-16 FLANGE FOR PROTECTION CUP

FILE NAME: 7102-029  
SHEET NO.: 12  
DFT. SCALE: 2:1  
MATERIAL: STN. STL. (MDC K075-B NW-16 BLANK FANGE OR EQUIV.)  
QTY: 1 PER ASM.  
NOTES:



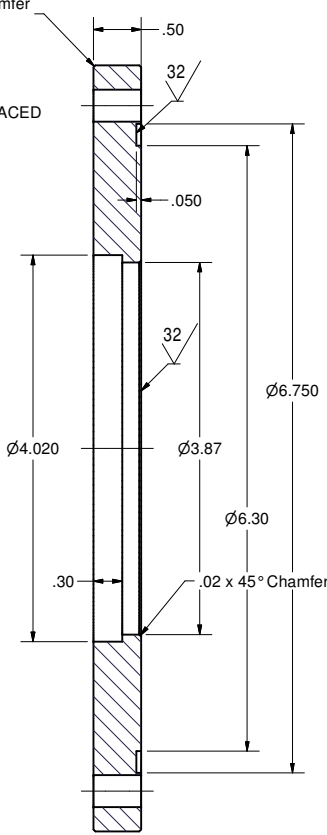
SCALE 1 : 2



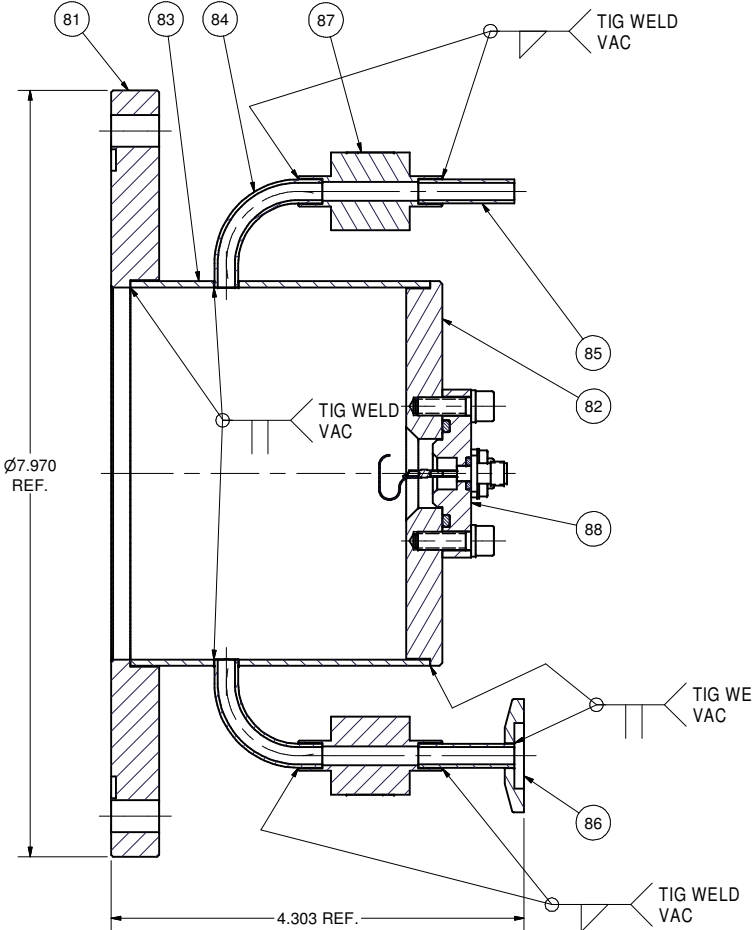
**81** FLANGE FOR PROTECTION CUP

FILE NAME: 7102-029  
SHEET NO.: 12  
DFT. SCALE: 1:1  
MATERIAL: STN. STL.  
QTY: 1 PER ASM.  
NOTES:

SECTION WW-WW

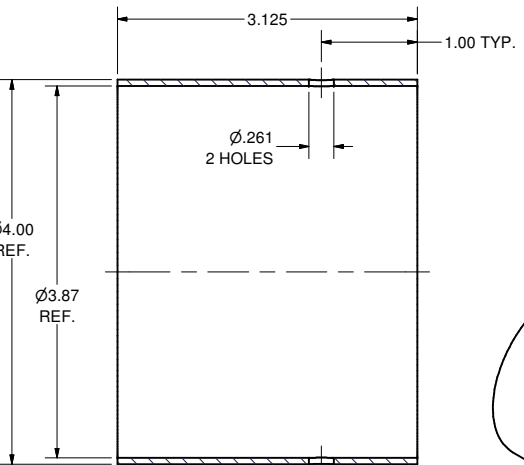


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OR EQUIVALENT APPROVED BY CORNELL LEPP



**80** PROTECTION CUP FOR COLD WINDOW

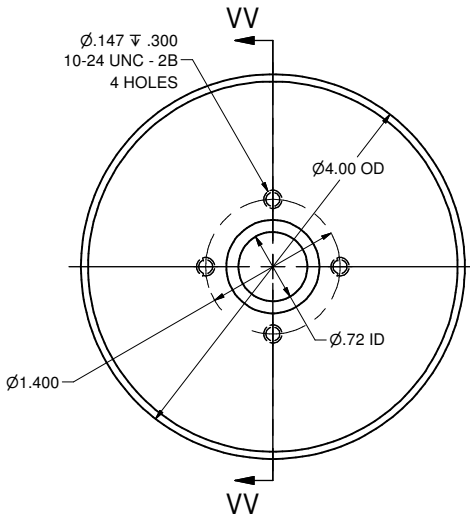
FILE NAME: 7102-029  
SHEET NO.: 12  
DFT. SCALE: 1:1  
MATERIAL:  
QTY: 2 REQ'D  
NOTES: 1. PAY ATTENTION ON FLOW DIRECTION THROUGH VALVES (LOOK AT ARROWS)



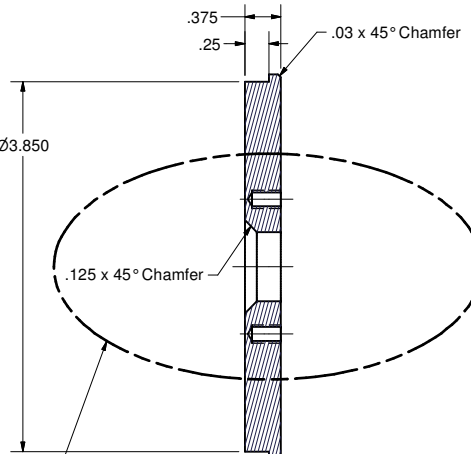
**83** TUBE FOR PROTECTION CUP

FILE NAME: 7102-029  
SHEET NO.: 12  
DFT. SCALE: 1:1  
MATERIAL: STN. STL. (4" x .065" TUBING)  
QTY: 1 PER ASM.  
NOTES:

SCALE 1 : 2



MACHINE CENTER HOLE AND FOUR TAPPED HOLES AFTER WELDING OF ITEM 80 (THIS SHEET). CENTER THIS MACHINING TO ITEM 81 O.D. TO ±0.005".



SECTION VV-VV

**82** COVER FOR PROTECTION CUP

FILE NAME: 7102-029  
SHEET NO.: 12  
DFT. SCALE: 1:1  
MATERIAL: STN. STL.  
QTY: 1 PER ASM.  
NOTES: SEE MACHINING NOTE.

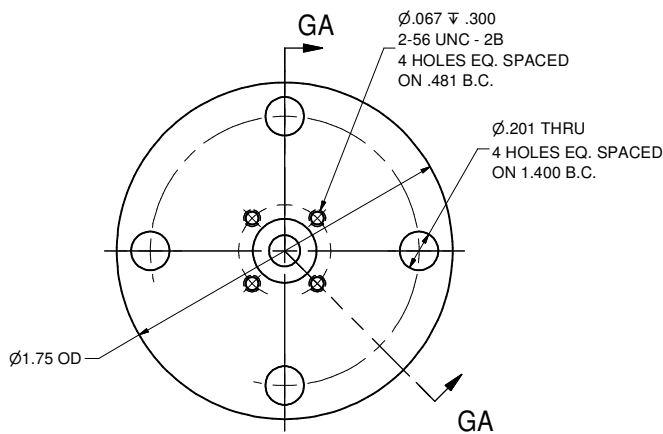
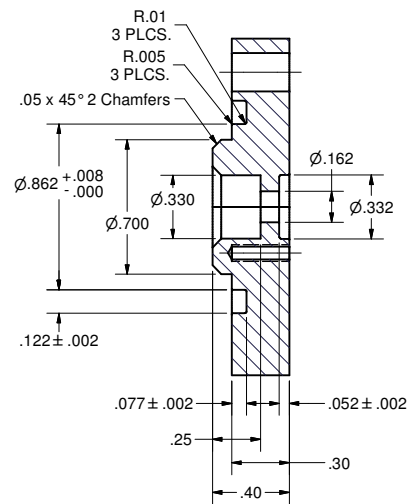
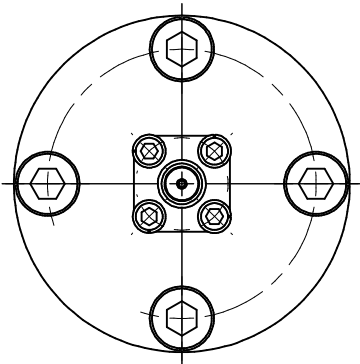
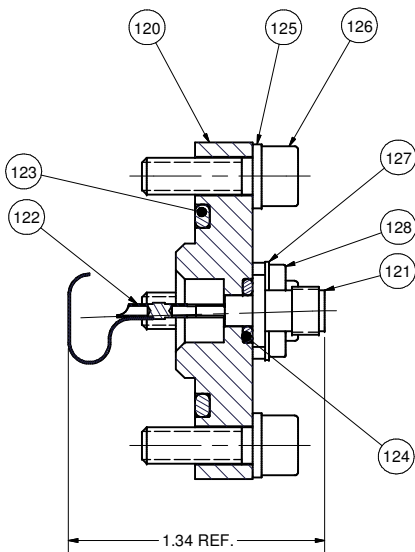
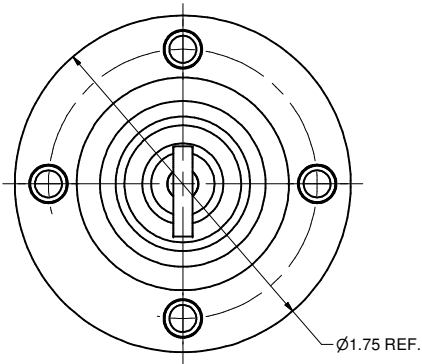
ITEM	DWG. NO.	DESCRIPTION	Q1	Q2	Q3	REMARKS	REV.
88	SHEET 13	RF PROBE, SUB-ASSEMBLY	1				
87	PURCHASED	SWAGelok SS-4H-TW VALVE	2			Swagelok	
86	SHEET 12	NW-16 FLANGE	1				
85	SHEET 12	1/4" PIPE FOR VALVE	2				
84	SHEET 12	90 DEGREES ELBOW FOR VALVE	2				
83	SHEET 12	TUBE FOR PROTECTION CUP	1				
82	SHEET 12	COVER FOR WINDOW CUP	1				
81	SHEET 12	FLANGE FOR PROTECTION CUP	1				
80	SHEET 12	PROTECTION CUP FOR COLD WINDOW	X				

ITEM	DWG. NO.	DESCRIPTION	Q1	Q2	Q3	REMARKS	REV.
88	SHEET 13	RF PROBE, SUB-ASSEMBLY	1				
87	PURCHASED	SWAGelok SS-4H-TW VALVE	2			Swagelok	
86	SHEET 12	NW-16 FLANGE	1				
85	SHEET 12	1/4" PIPE FOR VALVE	2				
84	SHEET 12	90 DEGREES ELBOW FOR VALVE	2				
83	SHEET 12	TUBE FOR PROTECTION CUP	1				
82	SHEET 12	COVER FOR WINDOW CUP	1				
81	SHEET 12	FLANGE FOR PROTECTION CUP	1				
80	SHEET 12	PROTECTION CUP FOR COLD WINDOW	X				

PRINT DISTR.	PLT DATE: 9/19/2007 CAD FILE NAME: 7102-029.idw	CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853	
CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES	CORNELL UNIVERSITY FLOYD R. NEWMAN LABORATORY ITHACA, NY 14853	
7102-029	7102-029	7102-029	
B	B	B	

CHECKED BY: VGV	DRAWN BY: VGV	DRAWN FOR: SAB	DATE: 5/4/2006	SCALE: D	7102-029	REV. B
APPROVED BY: VGV					SH. NO. 12 OF 16	

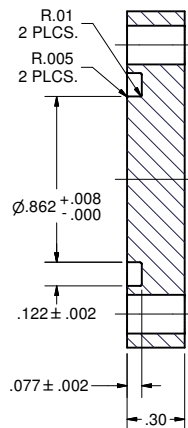
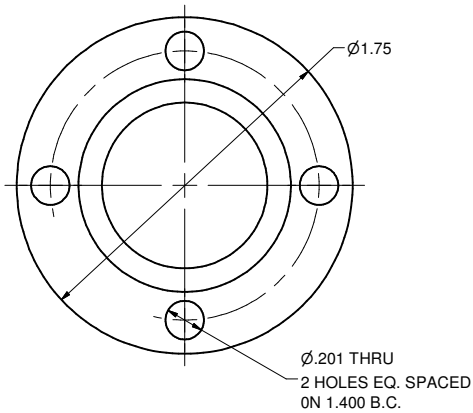
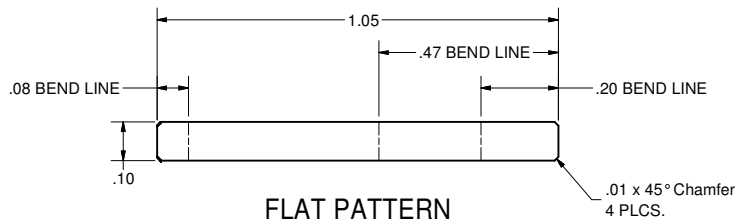
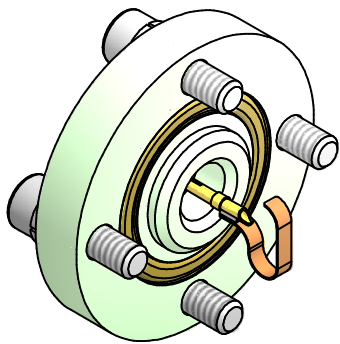
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO



#### 88 RF PROBE, SUB-ASSEMBLY

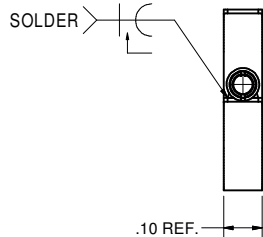
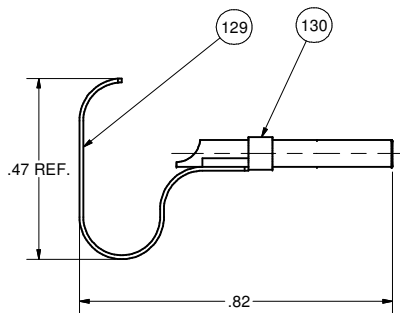
FILE NAME: 7102-029  
SHEET NO.: 13  
DFT. SCALE: 2:1  
MATERIAL:  
QTY: 2 FOR ASSEMBLY  
NOTES:

120 PROBE FLANGE  
FILE NAME: 7102-029  
SHEET NO.: 13  
DFT. SCALE: 2:1  
MATERIAL: 304 STN. STL.  
QTY: 1 FOR ASSEMBLY  
NOTES:



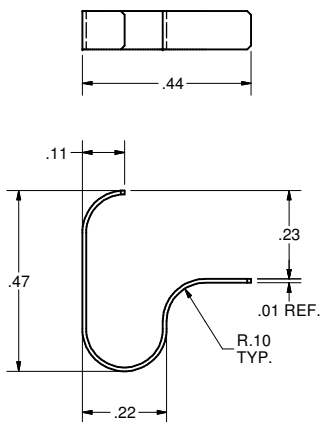
#### 131 COVER FOR PROBE HOLE

FILE NAME: 7102-029  
SHEET NO.: 13  
DFT. SCALE: 2:1  
MATERIAL: 304 STN. STL.  
QTY: 1 FOR ASSEMBLY  
NOTES:



#### 122 CONTACT, SUB-ASSEMBLY

FILE NAME: 7102-029  
SHEET NO.: 13  
DFT. SCALE: 4:1  
MATERIAL:  
QTY: 1 FOR ASSEMBLY  
NOTES:



#### 129 CONTACT

FILE NAME: 7102-029  
SHEET NO.: 13  
DFT. SCALE: 4:1  
MATERIAL: .01" THK PHOSPHOR BRONZE STRIP  
QTY: 1 FOR ASSEMBLY  
NOTES: FLAT PATTERN LENGTH IS 2.28".

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130	SOCKET CONTACT A1029-ND	1	AMPLIMITE	
129	SHEET 13 CONTACT	1		
128	PURCHASED No. 2-56 x 1/4 Hexagon Socket Head Cap Screw	4	Stn. Stl.	
127	PURCHASED No. 2 Regular Helical Spring Lock Washer	4	Stn. Stl.	
126	PURCHASED No. 10-24 x 5/8 Hexagon Socket Head Cap Screw	4	Stn. Stl.	
125	PURCHASED No. 10 Regular Helical Spring Lock Washer	4	Stn. Stl.	
124	PURCHASED VITON O-RING, SIZE #008	1		
123	PURCHASED VITON O-RING, SIZE #118	1		
122	SHEET 13 CONTACT SUB-ASSEMBLY	1	X	
121	PURCHASED SMA PANEL JACK 901-9888	1		AMPHENOL-RF
120	SHEET 13 PROBE FLANGE	1		
88	SHEET 13 RF PROBE, SUB-ASSEMBLY	X		

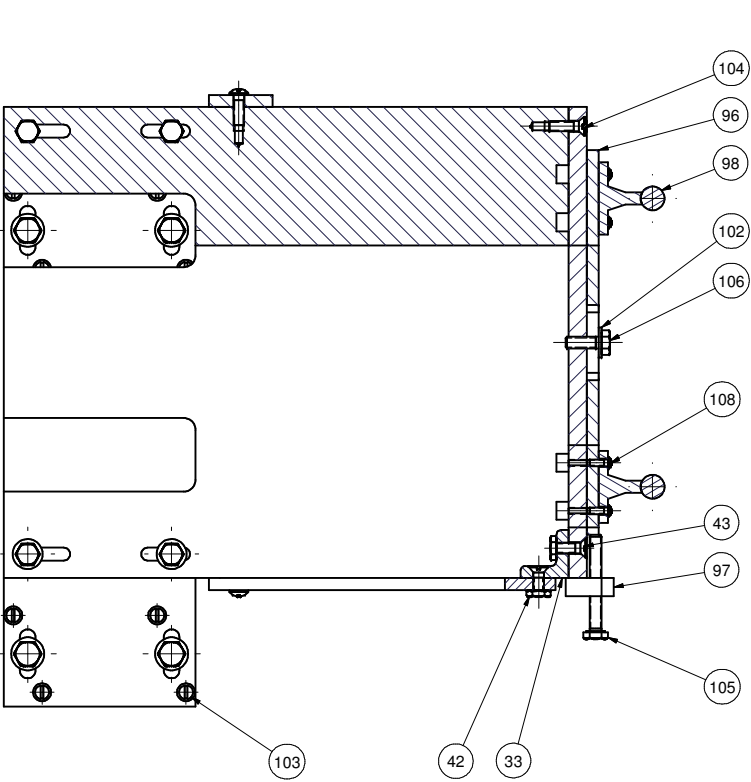
ITEM	DWG. NO.	DESCRIPTION	QUANTITY	REMARKS	REV.
130		SOCKET CONTACT A1029-ND	1		
129		SHEET 13 CONTACT	1		
128		PURCHASED No. 2-56 x 1/4 Hexagon Socket Head Cap Screw	4	Stn. Stl.	
127		PURCHASED No. 2 Regular Helical Spring Lock Washer	4	Stn. Stl.	
126		PURCHASED No. 10-24 x 5/8 Hexagon Socket Head Cap Screw	4	Stn. Stl.	
125		PURCHASED No. 10 Regular Helical Spring Lock Washer	4	Stn. Stl.	
124		PURCHASED VITON O-RING, SIZE #008	1		
123		PURCHASED VITON O-RING, SIZE #118	1		
122		SHEET 13 CONTACT SUB-ASSEMBLY	1	X	
121		PURCHASED SMA PANEL JACK 901-9888	1		AMPHENOL-RF
120		SHEET 13 PROBE FLANGE	1		
88		SHEET 13 RF PROBE, SUB-ASSEMBLY	X		

PRINT DISTR.	CR-1	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES	CORNELL UNIVERSITY LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS <b>LEPP</b>	CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853
CHECKED BY: VGV	DRAWN BY: VGV	DRAWN FOR: SAB	DATE: 5/4/2006	SCALE: D
APPROVED BY: VGV				

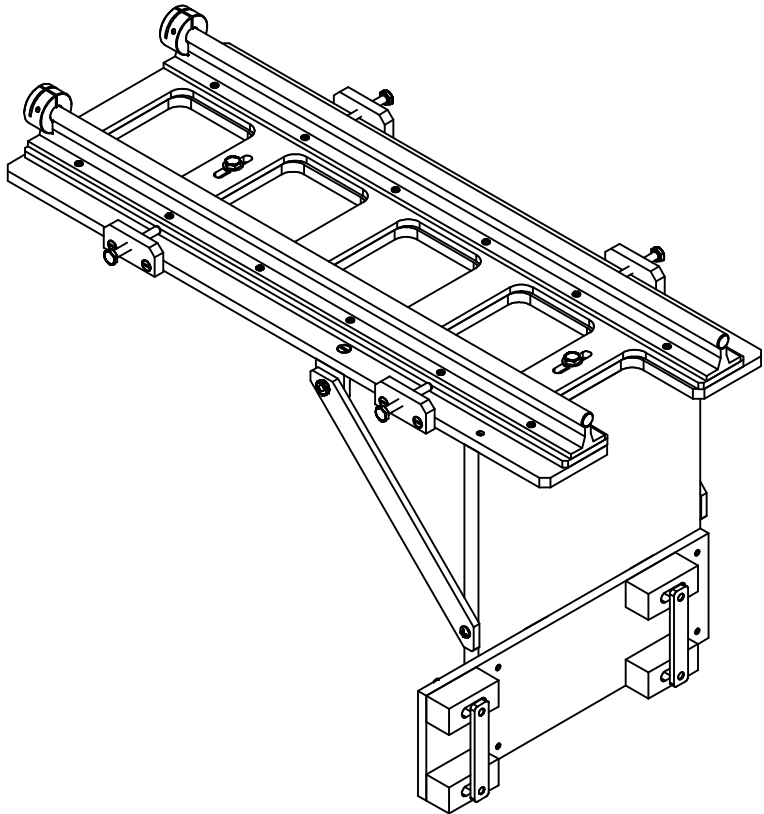
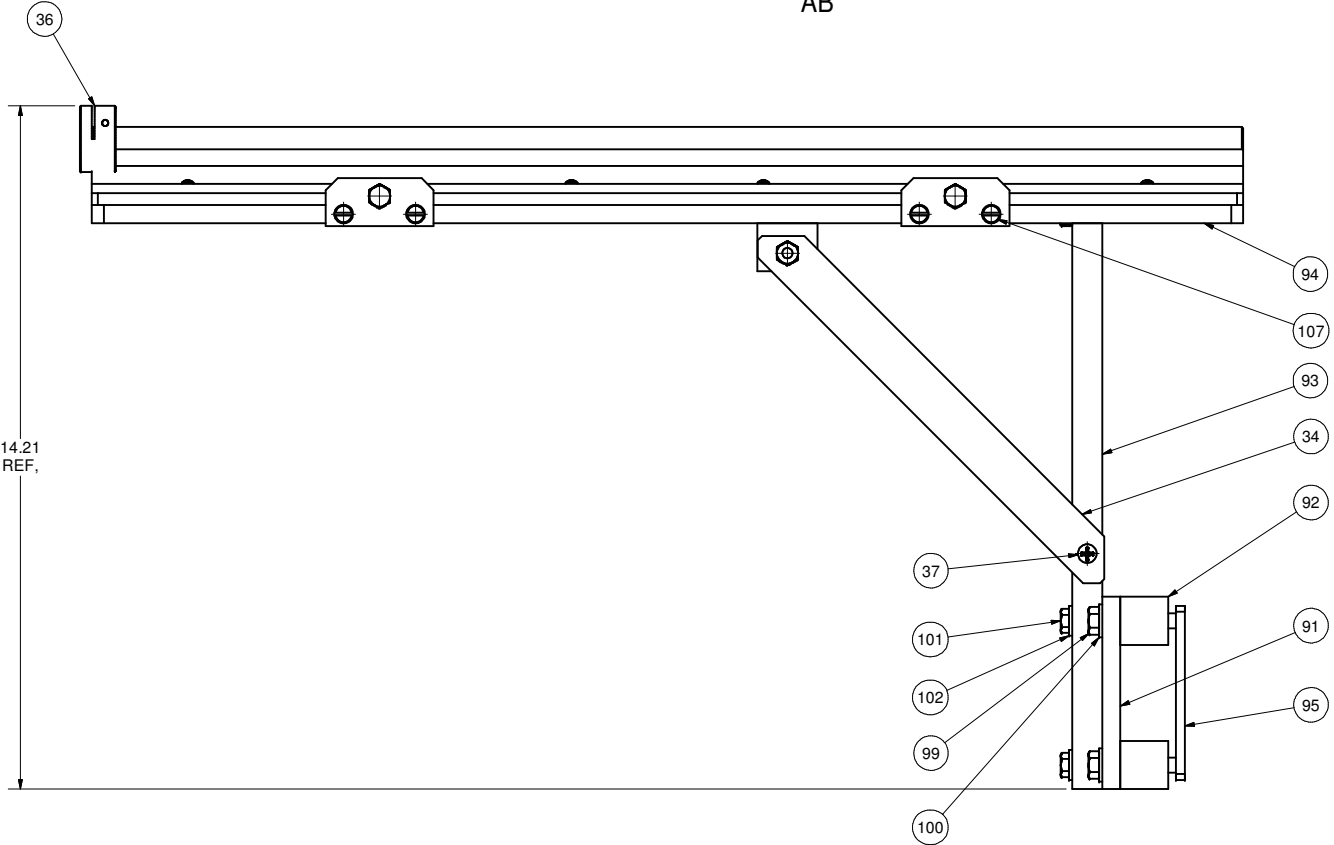
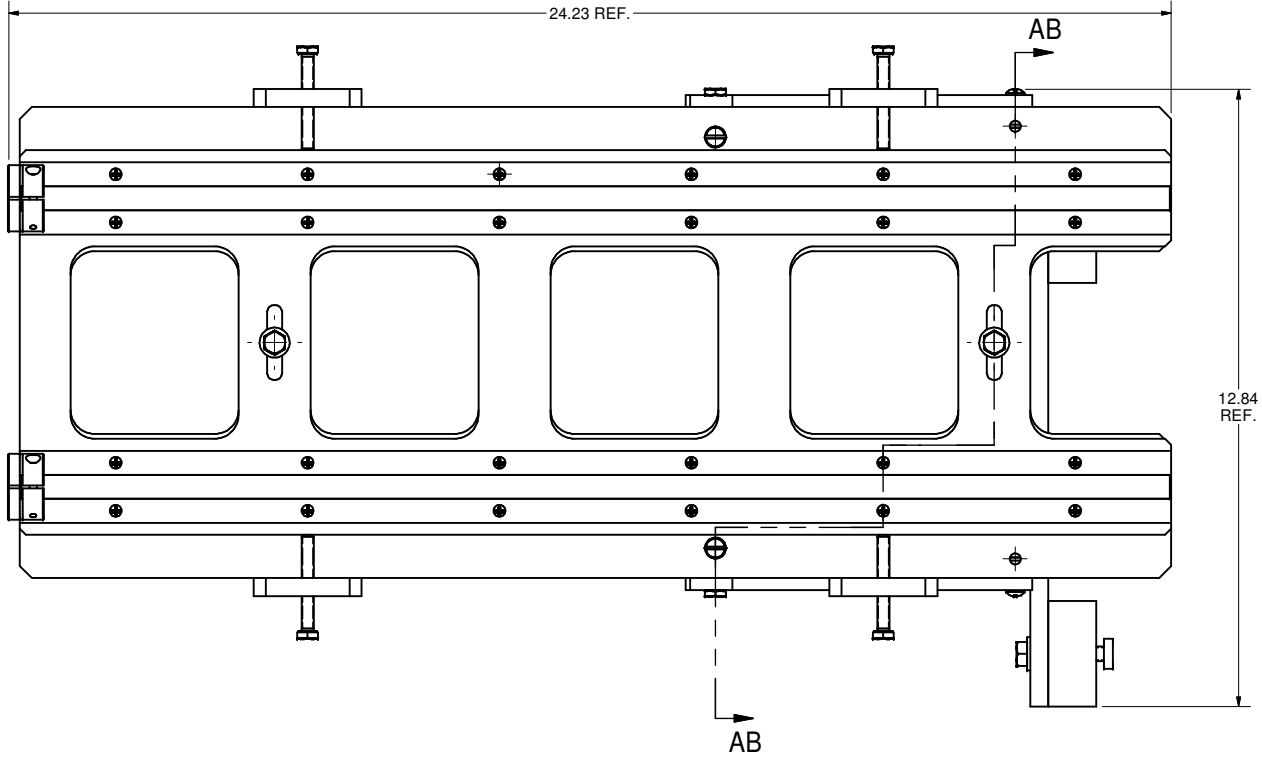
7102-029	SH. NO. 13 OF 16	7102-029	SH. NO. 13 OF 16
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REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Re-organized sheet contents to another sheet.	9/12/07	TIO
B		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO



SECTION AB-AB












SCALE 1:3

90 RAIL TRACK FOR MOUNTING "COLD" COUPLER PART TO NIOBIUM CAVITY, ASSEMBLY

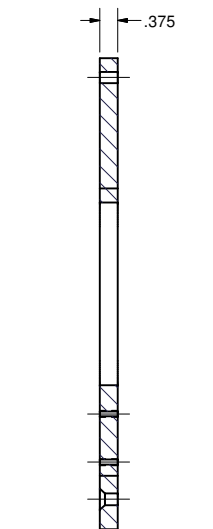
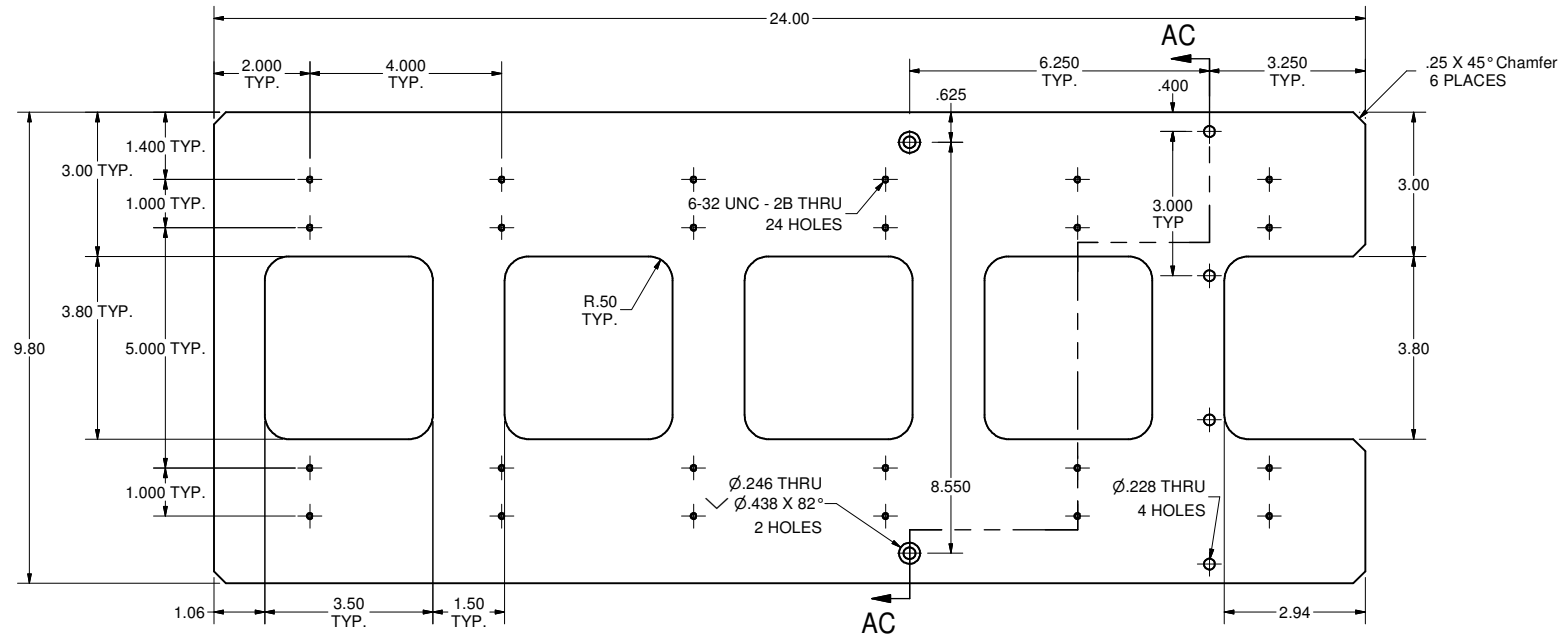
FILE NAME: 7102-029  
SHEET NO.: 14  
DFT. SCALE: 1:2  
MATERIAL:  
QTY: 1 REQ'D  
NOTES:

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ALKALINE DETERGENT LUBRICANT CIMSTAR 40  
OR EQUIVALENT APPROVED BY CORNELL LEPP

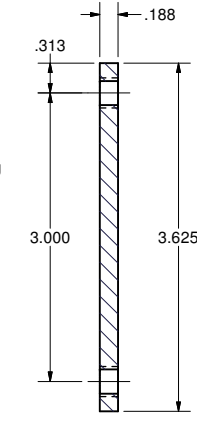
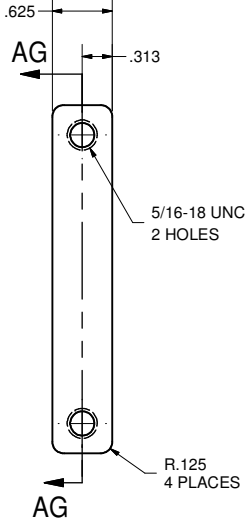
108	6 - 32 x 3/8 Fillister Head Machine Screw	24			PURCHASED
107	10-32 x 3/4 Slotted Flat Countersunk Head Machine Screw	8			PURCHASED
106	1/4-20 UNC x 0.75 Hex Bolt	2			PURCHASED
105	1/4-28 UNF x 2 Hex Cap Screw	4			
104	12-24 x 3/4 Slotted Flat Countersunk Head Machine Screw	4			PURCHASED
103	8-32 x 5/8 Slotted Flat Countersunk Head Machine Screw	8			PURCHASED
102	1/4 Plain Washer	6			PURCHASED
101	1/4-20 UNC x 1 Hex Bolt	4			PURCHASED
100	5/16 Plain Washer	4			PURCHASED
99	5/16-18 UNC x 1.875 Hex Bolt	4			PURCHASED
43	12-24 x 5/8 Slotted Flat Countersunk Head Machine Screw	4			PURCHASED
42	12 - 24 UNC Hex Machine Screw Nut	4			PURCHASED
37	12 - 24 - 5/8 Fillister Head Machine Screw	2			PURCHASED
36	END-STOP CLAMP, McM-C 5700K11	2			PURCHASED
98	SHAFT AND RAIL, McM-C 6557K21	2			PURCHASED
97	SHEET 15 PUSH PLATE	4			
96	SHEET 15 RAIL SUPPORT PLATE 5	1			
95	SHEET 14 NUT PLATE	2			
94	SHEET 14 RAIL SUPPORT PLATE 4	1			
93	SHEET 14 RAIL SUPPORT PLATE 3	1			
92	SHEET 14 SPACER	4			
91	SHEET 14 CLEAN ROOM VERTICAL PLATE	1			
34	SHEET 8 ARM 1	2			
33	SHEET 8 ANGLE 4	2			
90	SHEET 13 RAIL TRACK FOR MOUNTING COLD COUPLER PART TO CAVITY, ASM	X			

	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
						QUANTITY				
	PRINT DISTR.	PLOT DATE: 9/19/2007 CAD FILE NAME: 7102-029.idw								
		CR-1	UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± 0.10 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 	<div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div></div> <div>LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS</div>						
COUPLER ASSEMBLING FIXTURES										
RAIL TRACK FOR MOUNTING "COLD" COUPLER PART TO CAVITY, ASSEMBLY										
	CHECKED BY: VGV		DRAWN BY	DRAWN FOR	DATE	SCALE		7102-029	REV.	
	APPROVED BY: VGV		VGV	SAB	5/4/2006					
	7102-029 SH. NO. 14 OF 16	CR-1								
	REV. B									
		SH. NO. 14 OF 16								

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A	A8,F6	ITEM 93: IN PART INFO MAT'L 5/8" WAS 5/6" & ITEM 94: ADDED DIMS 8.550, .625, .400 & 3.000 TYP JGL	1/11/07	TIO
B		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO



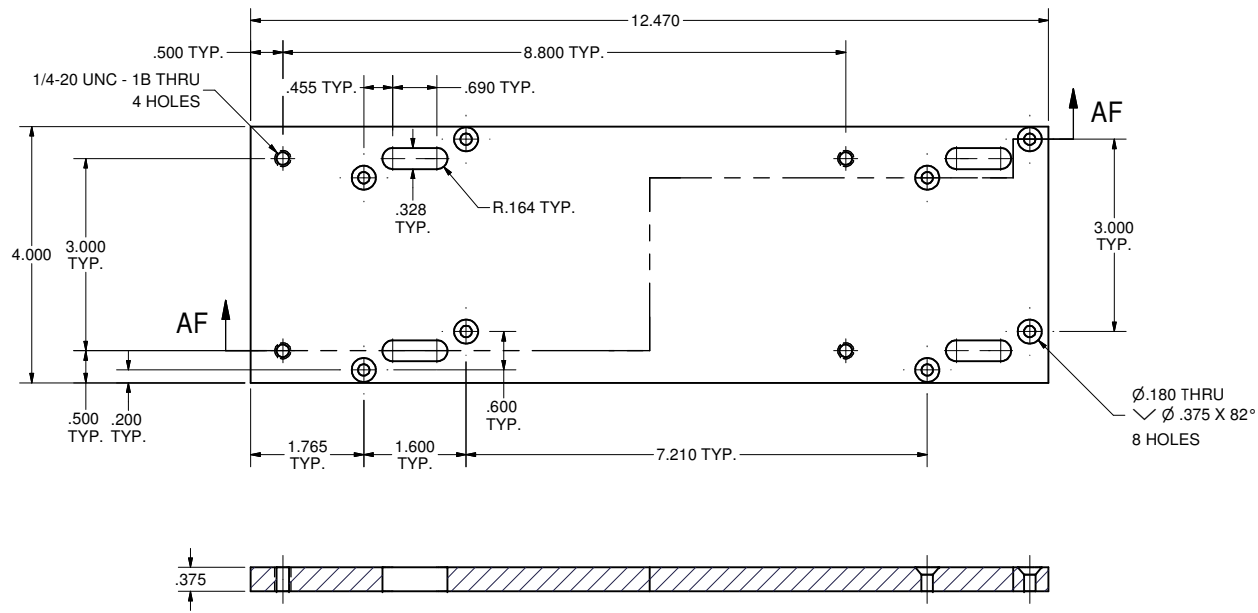
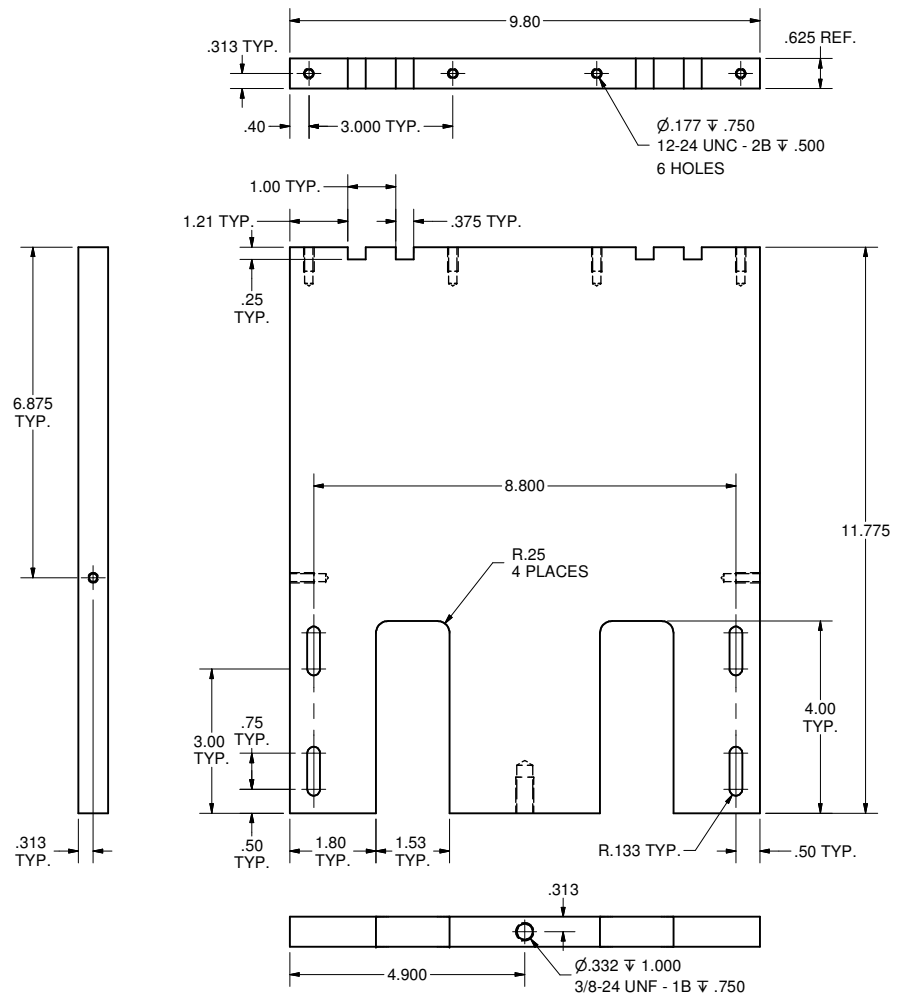
SECTION AC-AC



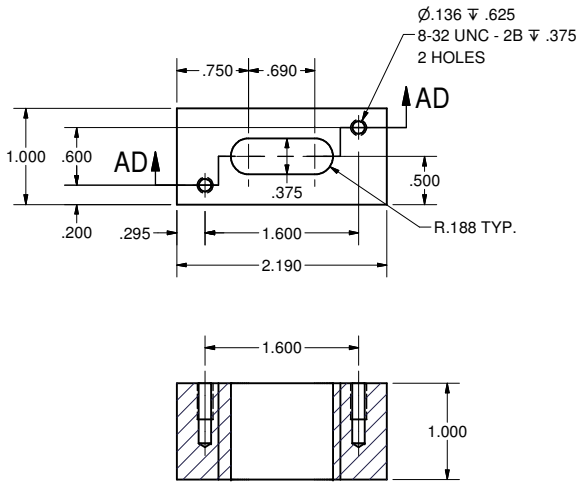
SECTION AG-AG

**94 RAIL SUPPORT PLATE 4**  
FILE NAME: 7102-029  
SHEET NO.: 15  
DFT. SCALE: 1:2  
MATERIAL: 3/8" ALUMINUM SHEET  
QTY: 1 FOR ASSEMBLY  
NOTES:

**95 NUT PLATE**  
FILE NAME: 7102-029  
SHEET NO.: 15  
DFT. SCALE: 1:1  
MATERIAL: 3/16" 304 STN. STL. SHEET  
QTY: 4 FOR ASSEMBLY  
NOTES:



SECTION AF-AF








SECTION AD-AD

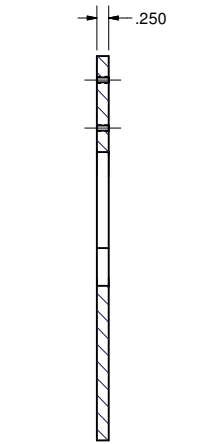
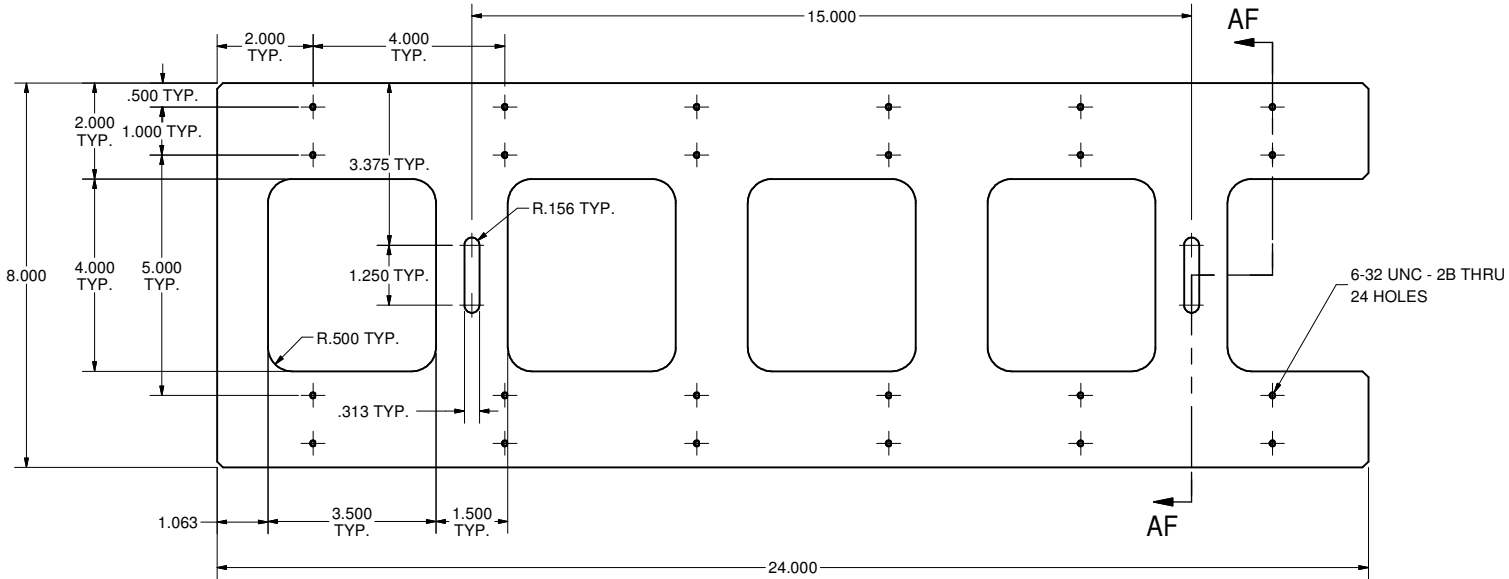
**92 SPACER**  
FILE NAME: 7102-029  
SHEET NO.: 15  
DFT. SCALE: 1:1  
MATERIAL: ALUMINUM  
QTY: 4 FOR ASSEMBLY  
NOTES:

**91 CLEAN ROOM VERTICAL PLATE**  
FILE NAME: 7102-029  
SHEET NO.: 15  
DFT. SCALE: 1:2  
MATERIAL: 3/8" ALUMINUM SHEET  
QTY: 1 FOR ASSEMBLY  
NOTES:

FOR MACHINING LUBRICANT USE ONLY  
ALKALINE DETERGENT LUBRICANT CIMSTAR 40  
OR EQUIVALENT APPROVED BY CORNELL LEPP

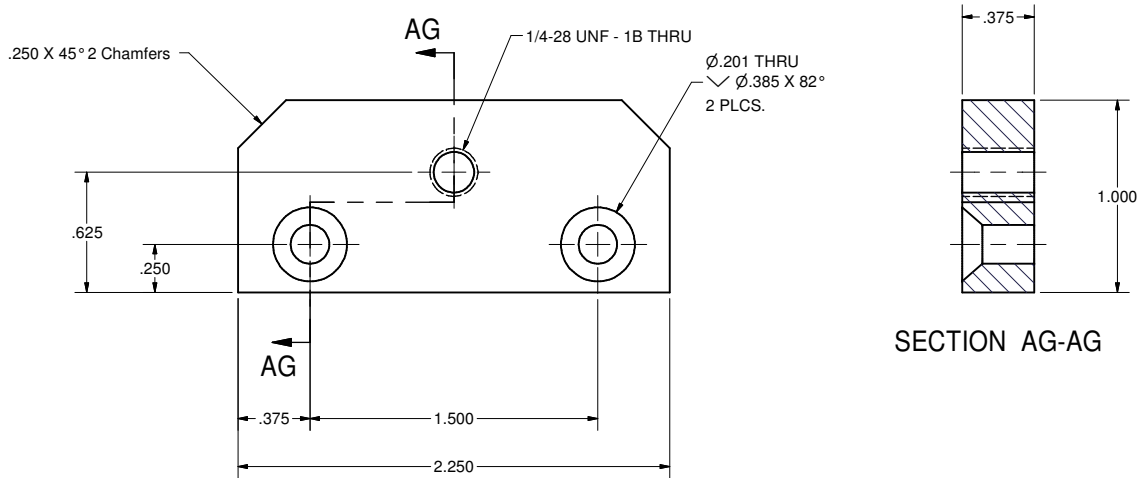
	ITEM	DWG. NO.	DESCRIPTION			G1	G2	G3	REMARKS	REV.
				QUANTITY						
	PRINT DISTR.	PLOT DATE: 9/19/2007 CAD FILE NAME: 7102-029.idw								
	7102-029 SH. NO. 15 OF 16	CR-1	UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES 	<div><div>CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853</div></div> <div>COUPLER ASSEMBLING FIXTURES RAIL TRACK FOR MOUNTING "COLD" COUPLER PART TO CAVITY, ASSEMBLY</div>						
CHECKED BY: VGV				DRAWN BY VGV	DRAWN FOR SAB	DATE 5/4/2006	SCALE		7102-029 SH. NO. 15 OF 16	REV. B
APPROVED BY: VGV										

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APP.
A		Re-release all sheets to ensure all VGV changes are in circulation.	9/12/07	TIO



SECTION AF-AF



96 RAIL SUPPORT PLATE 5  
FILE NAME: 7102-029  
SHEET NO.: 16  
DFT. SCALE: 1:2  
MATERIAL: 1/4" ALUMINUM SHEET  
QTY: 1 FOR ASSEMBLY  
NOTES:



SECTION AG-AG

97 PUSH PLATE  
FILE NAME: 7102-029  
SHEET NO.: 16  
DFT. SCALE: 1:2  
MATERIAL: 3/8" BRONZE SHEET  
QTY: 4 FOR ASSEMBLY  
NOTES:

FOR MACHINING LUBRICANT USE ONLY  
ALKALINE DETERGENT LUBRICANT CIMSTAR 40  
OR EQUIVALENT APPROVED BY CORNELL LEPP

	ITEM	DWG. NO.	DESCRIPTION	G1	G2	G3	REMARKS	REV.
				QUANTITY				
PRINT DISTR.	PLOT DATE: 9/19/2007 CAD FILE NAME: 7102-029.idw							
7102-029 SH. NO. 16 OF 16	CR-1	UNLESS OTHERWISE SPECIFIED:  DIMENSIONS ARE IN INCHES: TOLERANCES ON: .00 ± .010 .000 ± .005 FRACTIONS ± 1/64 ANGLES ± 0.5° ALL SURFACES ✓	 CORNELL UNIVERSITY Floyd R. Newman Laboratory Ithaca, NY 14853  LABORATORY FOR ELEMENTARY-PARTICLE PHYSICS					
			COUPLER ASSEMBLING FIXTURES					
			CHECKED BY: VGV APPROVED BY: VGV					
REV. A	DRAWN BY VGV		DRAWN FOR SAB	DATE 5/4/2006	SCALE	D	7102-029 SH. NO. 16 OF 16	REV. A