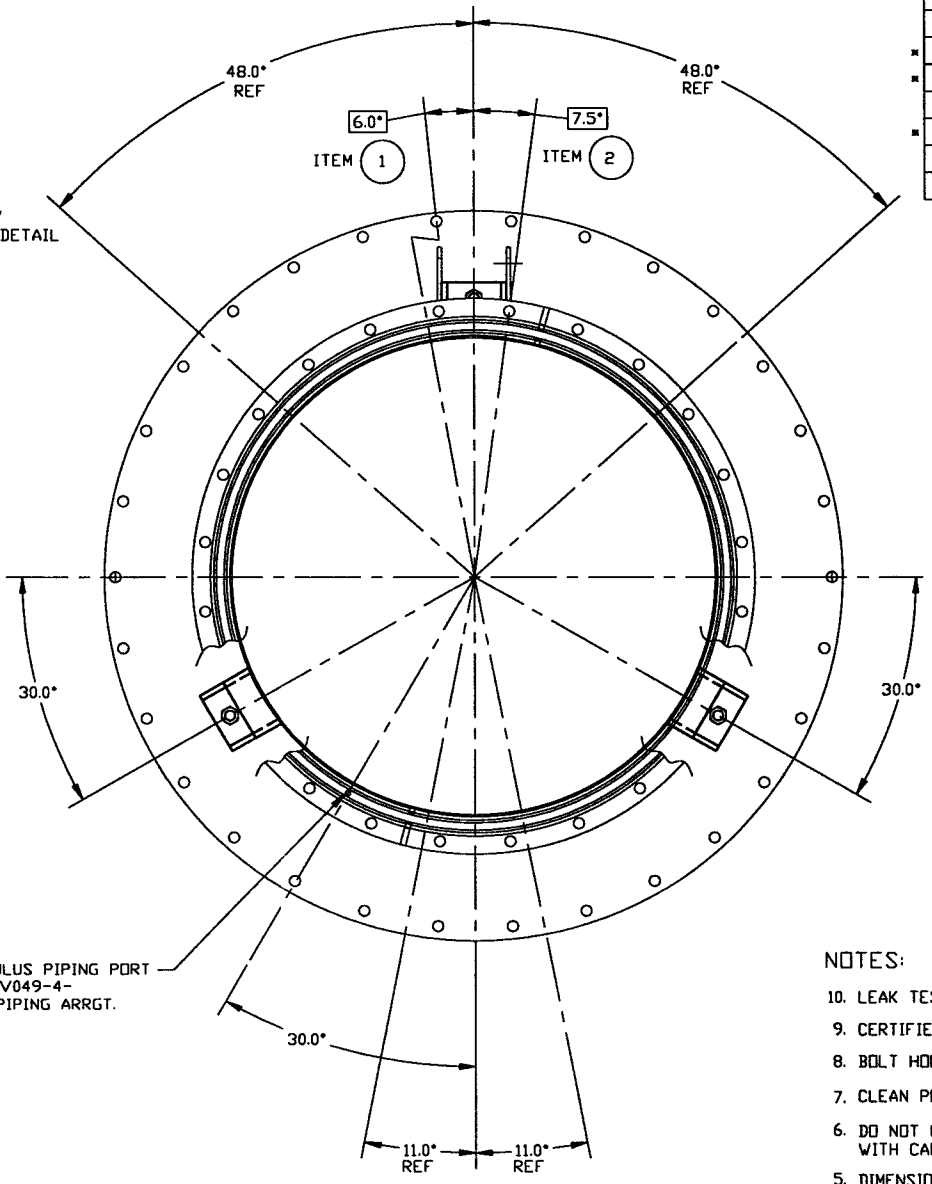
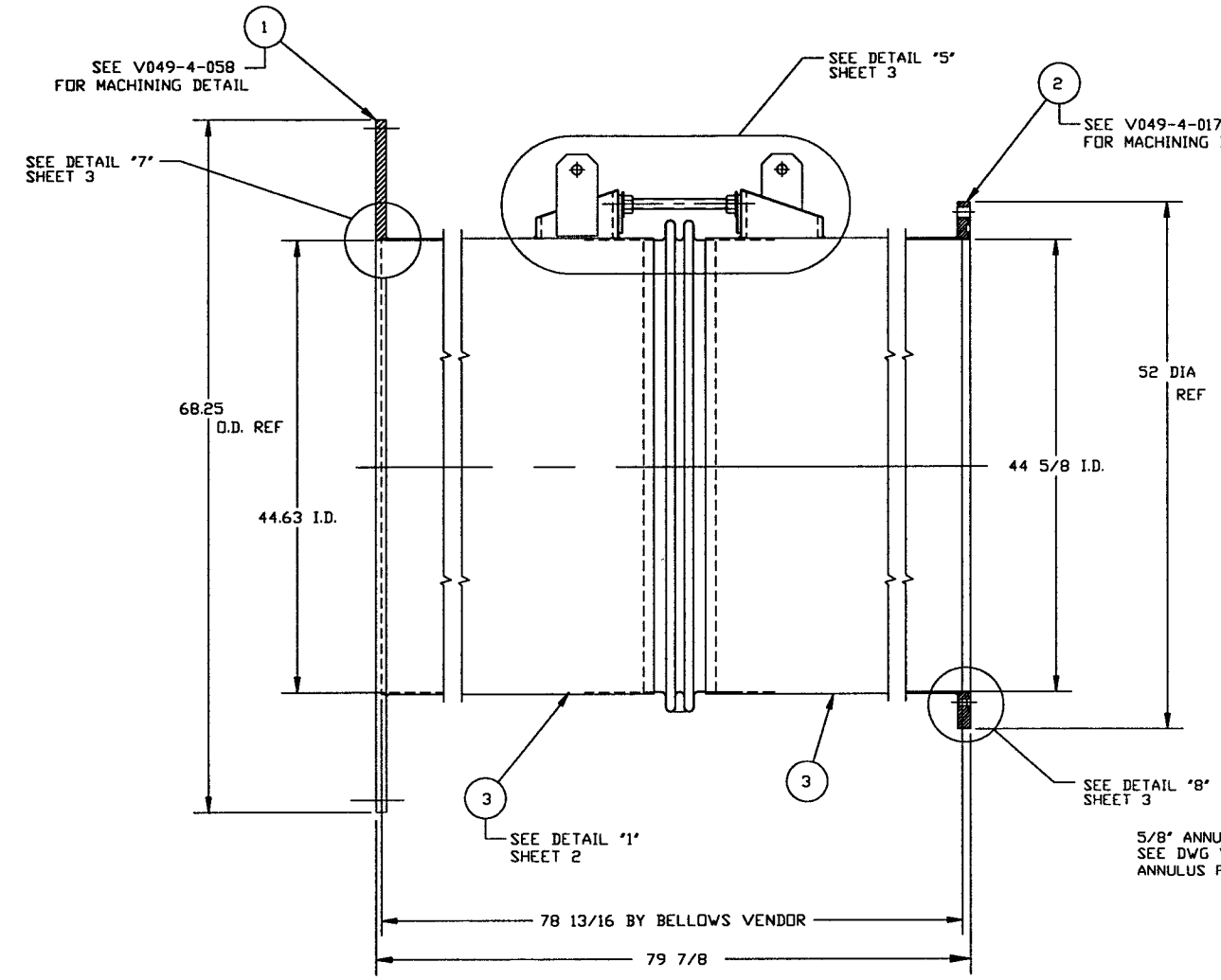


ITEM	PART NUMBER	SUFFIX	QTY	UM	DESCRIPTION
1	V0494058		1	EA	FLANGE, FLAT FACED, 44 5/8" I.D. x 68 1/4" O.D.
2	V0494017		1	EA	FLANGE, GROOVED, 44 5/8" I.D. x 52" O.D.
3	XX		XX	SF	PLATE, 304L SST, 1/4" THK
5	XX		15	FT	TUBING, ROUND, 304L SST, 8" O.D. x 12 WALL
6	XX		25	FT	TUBING, RECT. 304L SST, 8" x 6" 1/2" THK (304 SST)
7	XX		1	EA	BELLOWS
8	XX		12	EA	NUT, HEX, A563 GR-A, 1"-8 UNC-2B
9	XX		3	EA	ROD, THREADED, 1"-8 UNC-2A X 1'-0" LG (A36)
11	XX		12	EA	WASHER, FLAT 1", STL
12	XX		XX	SF	PLATE, 3/8" THK 304 SST
13	XX		6	EA	PLATE, 4"x3 3/4" x 3/8" THK 304 SST

*** ELECTROLESS NICKEL PLATED

NOT FOR CONSTRUCTION



NOTES:

- LEAK TEST & METHOD PER PSI SPEC: V049-2-014
- CERTIFIED MANUFACTURER'S MATERIAL TEST REPORTS REQUIRED.
- BOLT HOLES TO STRADDLE CENTERLINES AS SHOWN, +/- .015
- CLEAN PER SPEC: V049-2-015
- DO NOT USE CARBON STEEL BRUSHES OR BRUSHES CONTAMINATED WITH CARBON STEEL ON STAINLESS OR ALUMINUM MATERIAL.
- DIMENSIONS SHOWN IN PARENTHESES ARE IN MILLIMETERS.
- ADAPTER FABRICATION TO BE IN ACCORDANCE WITH SPEC. V049-2-097.
- FOR FLANGE DETAILS SEE DWG. V049-4-017 & 058.
- THESE FLANGES EACH INCLUDE AN ANNULAR CHANNEL BETWEEN O-RINGS, MANIFOLD TO A SINGLE PUMPOUT PORT ON EACH CHAMBER, SEE DWG V049-4-017.
- REGISTERED TRADEMARK, VARIAN VACUUM PRODUCTS; COMPATIBLE ALTERNATIVES ARE ACCEPTABLE.

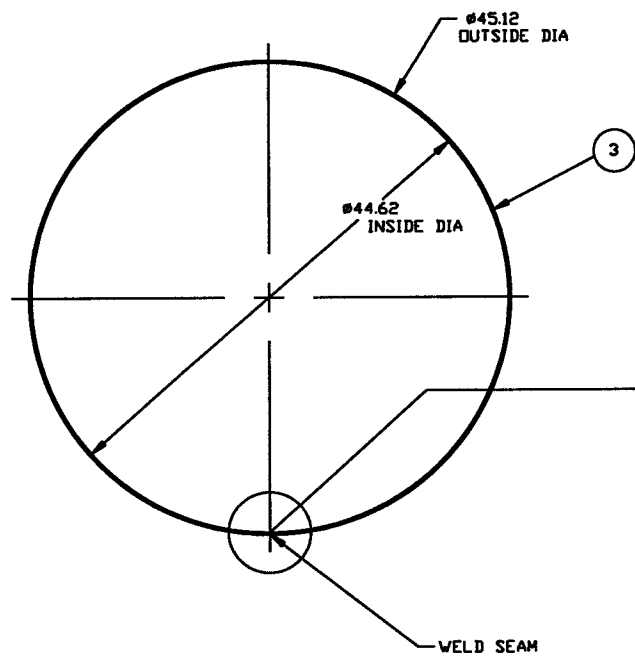
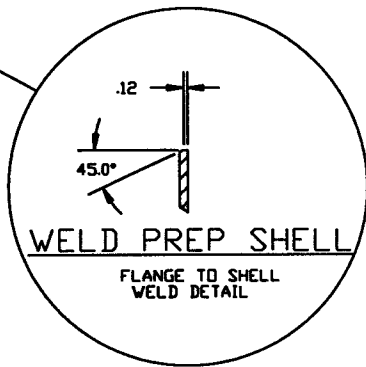
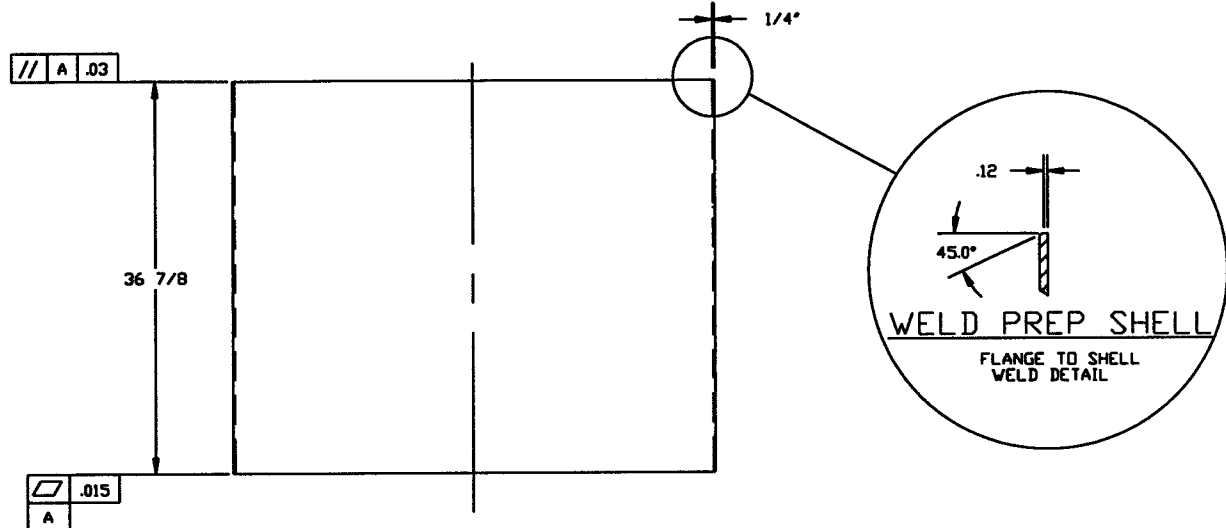
Raymond D. Coates, PE

5/6/96 LIGO D961148-00-V

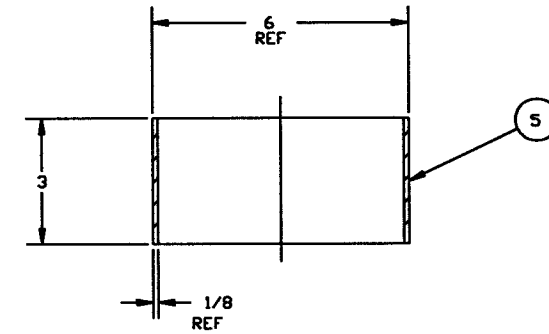
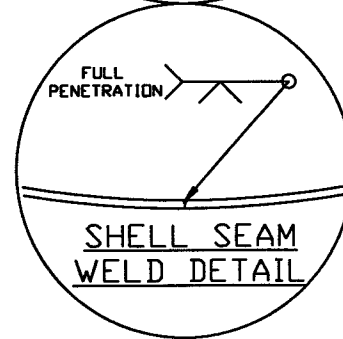
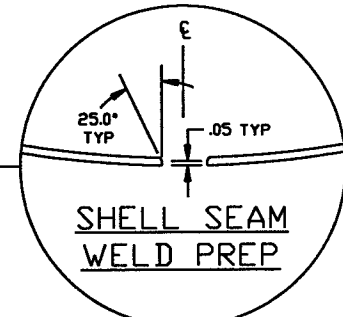
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± .01 ANGULAR ± .5° TWO PLACE DECIMAL ± .01 THREE PLACE DECIMAL ± .005 FINISHED SURFACE RNS BREAK CORNERS OR OUT- REMOVING ALL BURRS		DO NOT SCALE THIS DRAWING		0	ISSUED FOR FDR	MA 04/30/96 0145		CAB FILE 4A14S1		SIZE D	DWG NO. V049-4-A14	REV 0												
NEXT ASS'Y:		REV		DESCRIPTION		CHKD	DRWN	DATE	DESN	SCALE 1-1/2" = 1"	SHEET 1 OF 3													
<table border="1"> <thead> <tr> <th>DWG. NO.</th> <th>DESCRIPTION</th> <th>DWG. NO.</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>													DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION								
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<table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>CHKD</th> <th>DRWN</th> <th>DATE</th> <th>DESN</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>ISSUED FOR FDR</td> <td></td> <td></td> <td>04/30/96</td> <td>0145</td> </tr> </tbody> </table>													REV	DESCRIPTION	CHKD	DRWN	DATE	DESN	0	ISSUED FOR FDR			04/30/96	0145
REV	DESCRIPTION	CHKD	DRWN	DATE	DESN																			
0	ISSUED FOR FDR			04/30/96	0145																			

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Rev. 05, 1996 - 1533920



DETAIL "1"
SCALE: 1-1/2"=1"
QTY: 2



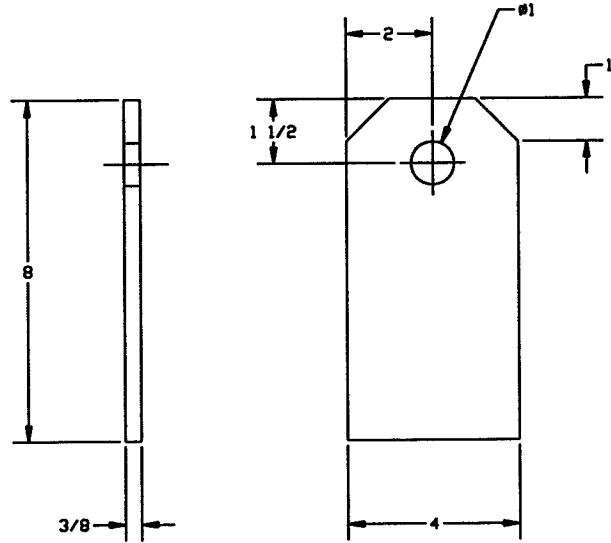
DETAIL "3"
QTY: 6

NOT FOR CONSTRUCTION

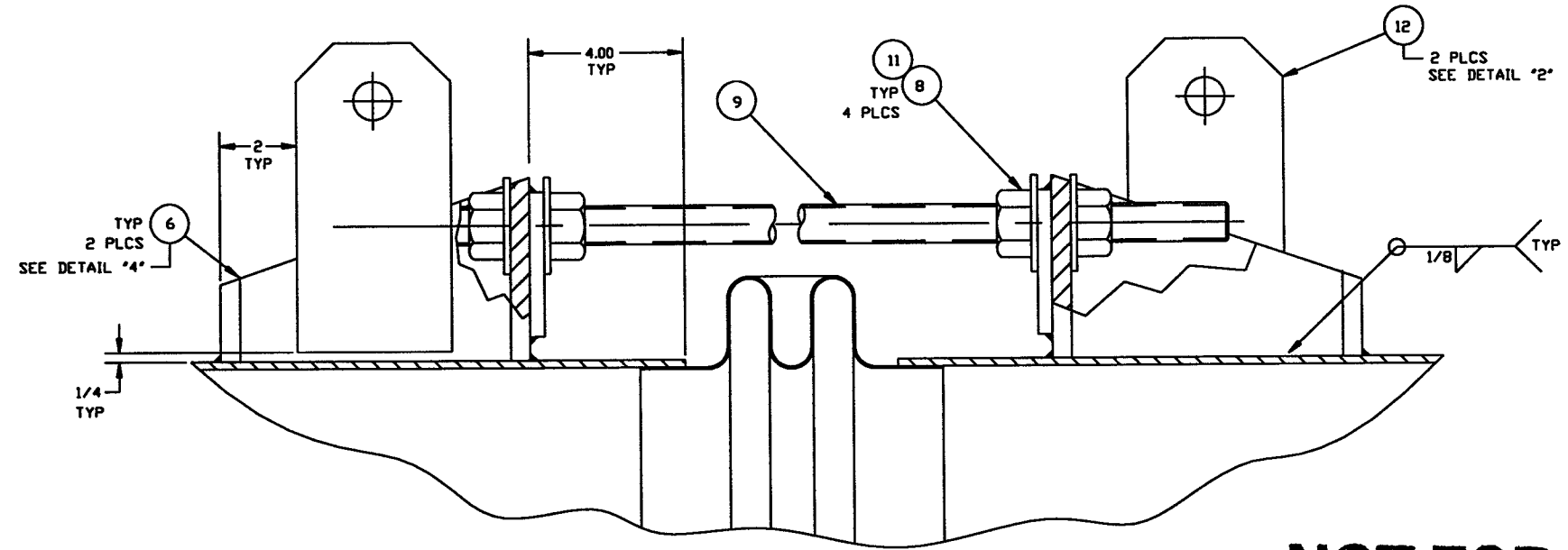
Raymond D. Ciatta
5/6/96

LIGO 0961148-00-V

PROCESS SYSTEMS INTERNATIONAL INC. <small>20 WALMAP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA</small>			
ADAPTER A-14 44 5/8" I.D. x 60 1/2" I.D. LIGO VACUUM EQUIPMENT			
CAD FILE 4A14S2	SIZE D	DWG. NO. V049-4-A14	REV. 0
SCALE AS NOTED	SHEET 2 OF 3		REV. 05.1996 - 148029

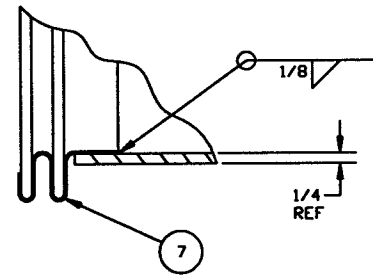


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QTY: 2

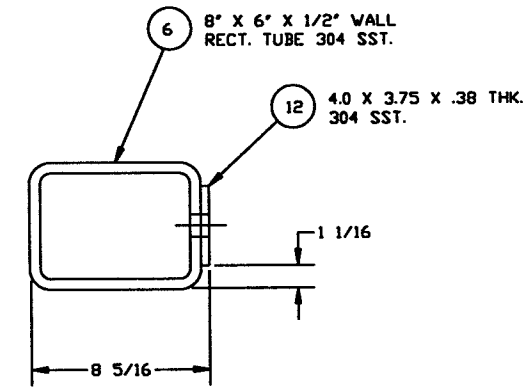


DETAIL "5"
EXPANSION JOINT & TIE ROD ASSY.
QTY: 3

**NOT FOR
CONSTRUCTION**

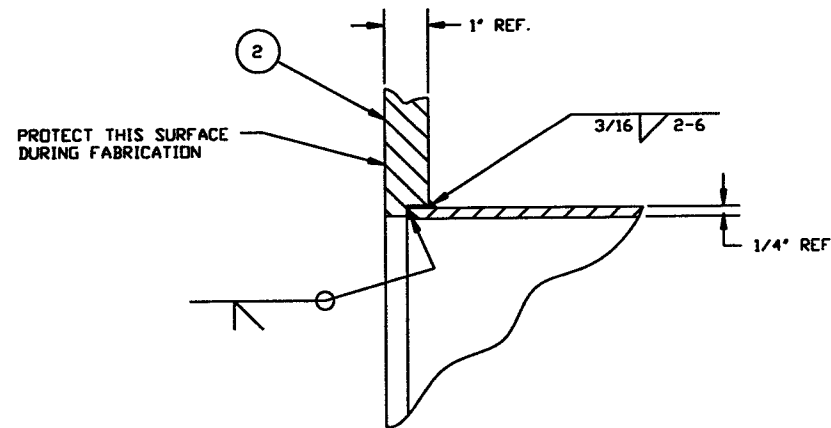


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QTY: 2

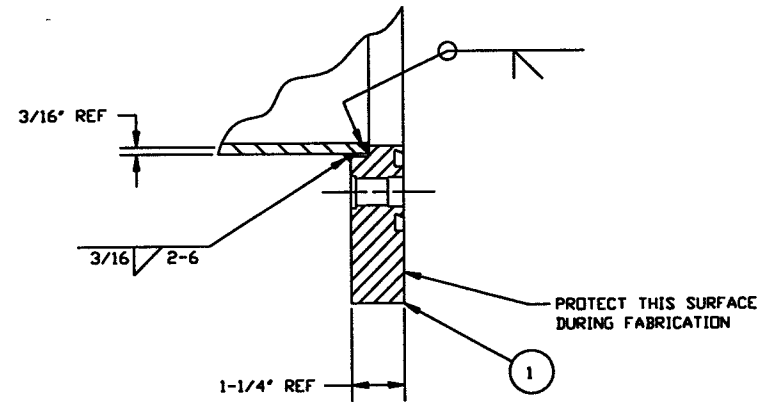


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QTY: 6

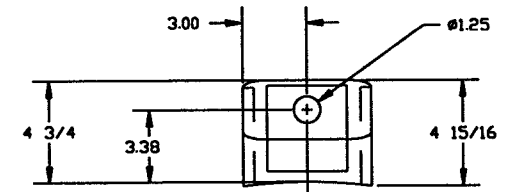
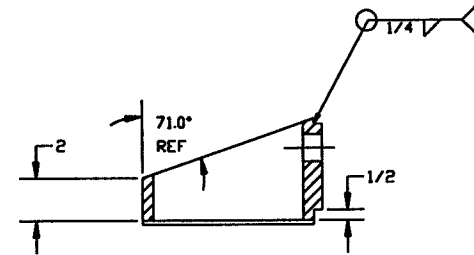
Hold



DETAIL "7"



DETAIL "8"



*Raymond D. Gatto
5/6/96*

LIGO D961148-00-V

PROCESS SYSTEMS INTERNATIONAL INC. 20 WALRUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA			
ADAPTER A-14 44 5/8" ID x 60 1/2" I.D LIGO VACUUM EQUIPMENT			
C&P FILE 4A14S3	SIZE D	ENG. NO. V049-4-A14	REV. 0
SCALE	SHEET 3 OF 3		

PROJECT - 960120