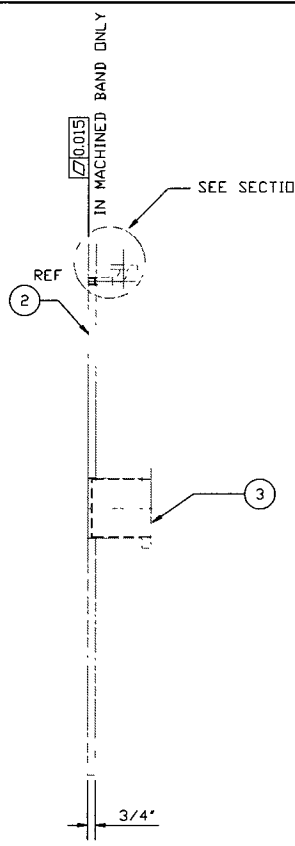
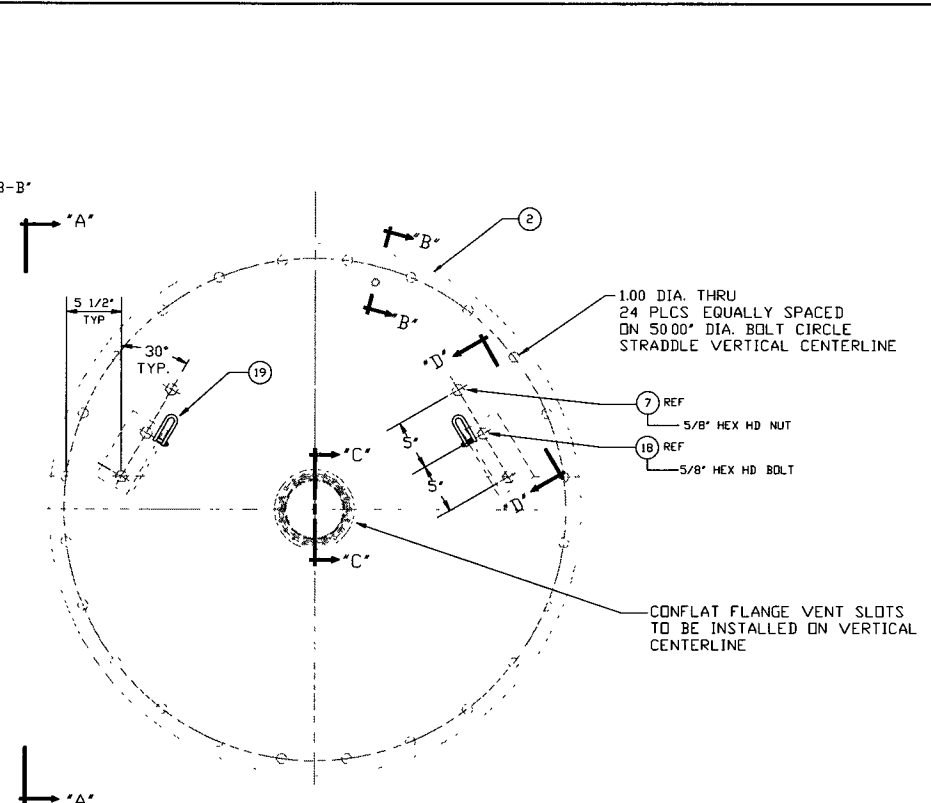


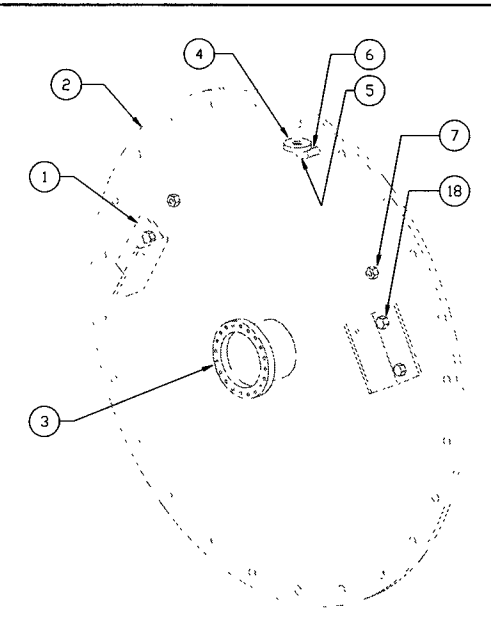
ELEVATION
(LOOKING AT MACHINED SIDE)
SCALE: 1 1/2"=1'-0"



SECTION 'A-A'
SCALE: 1 1/2"=1'-0"

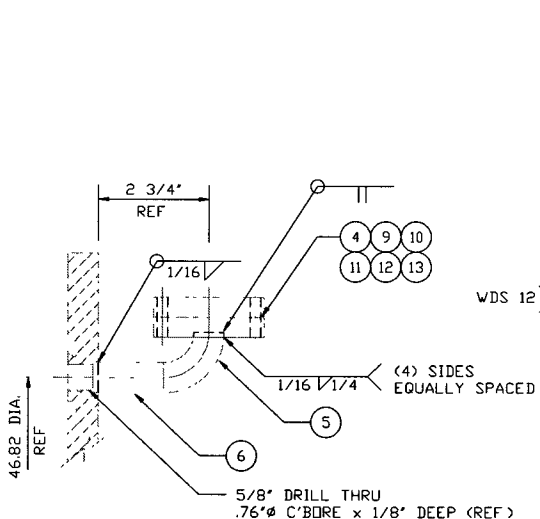


ELEVATION
(LOOKING AT NON-MACHINED SIDE)
SCALE: 1 1/2"=1'-0"

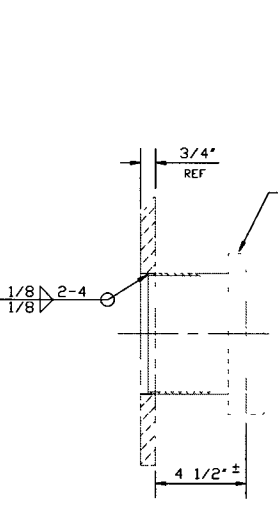


ISO VIEW

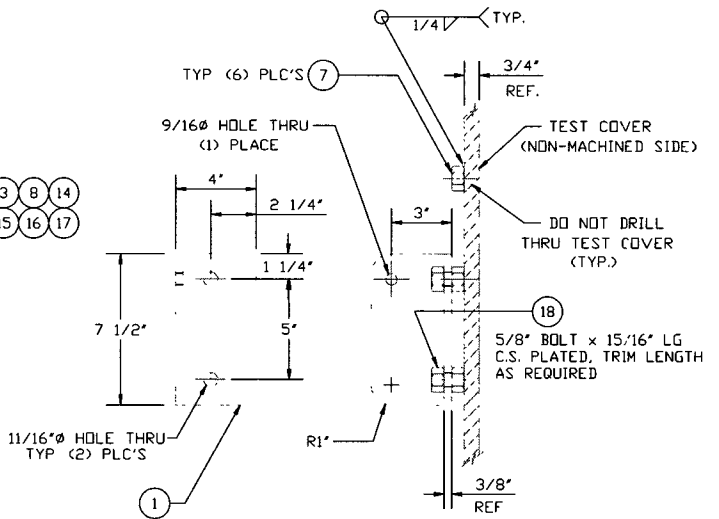
ELECTRONIC COPY



SECTION 'B-B'
SCALE: 6"=1'-0"



SECTION 'C-C'
SCALE: 3"=1'-0"



SECTION 'D-D'
REMOVABLE LIFTING LUG
SCALE: 3"=1'-0"

NOTES:

- 1) FLANGES WILL BE USED IN ULTRA HIGH VACUUM SERVICE. SEE SPECIFICATION V049-2-136 FOR MACHINING REQUIREMENTS.
- 2) ALL MATERIAL TO BE 304 STAINLESS STEEL, EXCEPT AS NOTED.
- 3) WELDING PROCESS TO MINIMIZE DISTORTION/FLATNESS OF PLATE. MACHINING VENDOR TO FLATTEN ASS'Y PRIOR TO MACHINING.
- 4) FLANGE FINAL FACE CUTS AND O-RING GROOVES MUST BE MACHINED DURING THE SAME SETUP.
- 5) MACHINE TOOL LAY TO BE CONCENTRIC ON ALL SURFACES THAT REQUIRE A 32 RMS FINISH.
- 6) NO ABRASIVE STONES, CLOTHS OR GRINDING WHEELS MAY BE USED.
- 7) NO OIL BASED OR HYDROCARBON BASED CUTTING FLUIDS TO BE USED.
- 8) NO CARBON STEEL OR OTHER SOURCE OF IRON CONTAMINATION ARE TO COME IN CONTACT WITH FLANGES DURING MANUFACTURING OR HANDLING.
- 9) FLANGES MUST BE PACKAGED, HANDLED, AND SHIPPED IN SUCH A MANNER AS TO MAINTAIN SPECIFIED SURFACE FINISHES AND FLATNESS TOLERANCES.
- 10) COMPLETE WASH & WRAP IN POLYETHYLENE TO PREVENT CONTAMINATION DURING SHIPPING. CAP CONFLAT FLANGES.

FIELD REF {
INNER O-RING - P/N V049M027
OUTER O-RING - P/N V049M026
FINISHED WEIGHT: 650 LBS

LIGO-D990310-00-V

ITEM	PART NUMBER	QTY	U/M	DESCRIPTION
19	204147	2	EA	SHACKLE, SST, 1/2" SCREW PIN McMAS P/N 35355T17
18	B0521144	4	EA	BOLT, STL, 5/8-11 x 1" LG
17	V049M785	40	EA	WASHER SST, 5/16"
16	V049M782	20	EA	NUT, BRZ, 5/16-18
15	V049M777	20	EA	BOLT, SST, 5/16-18 x 2 1/2"
14	V049M262_3	1	EA	BLANK, CONFLAT, 8" OD
13	V049M784	12	EA	WASHER, SST 1/4"
12	V049M781	6	EA	NUT, BRZ, 1/4-20
11	V049M775	6	EA	BOLT, SST, 1/4-20 x 1 1/2"
10	202550_3	1	EA	BLANK, CONFLAT 2 3/4" OD
9	V049M751_3	1	EA	GASKET, CONFLAT, 2 3/4" OD CF
8	V049M263_3	1	EA	GASKET, CONFLAT, 8" OD CF
7	204146	60	EA	NUT, SST, 5/8" HEAVY HEX HD
6	V049M470	3	FT	TUBE, 304 SST, 3/4" OD X 065 WT
5	V049M508_3	1	EA	ELBDW, SST, 90°, 3/4" OD TUBE
4	203367-3	1	EA	FLANGE, 3/4" OD TUBE X 2 3/4" OD CF
3	V049M313_3	1	EA	HALF NIPPLE, 6" OD TUBE X 8" CF X 5" LG
2	V049M850	1	EA	PLATE, 3/4" THK X 53" OD 304 SST
1	C857906-04-04	14	FT	L 4x4x3/8" MAT'L 304 SST

BILL OF MATERIALS

DWG NO	DESCRIPTION	DWG NO	DESCRIPTION
8		7	
6		5	
4		3	
2		1	

DO NOT SCALE THIS DRAWING	ISSUED FOR FABRICATION	LD	5/8/98	0614
USED ON:	REV	DESCRIPTION	DATE	DESN
NEXT ASS'Y		ISSUE DESCRIPTION	SCALE	AS NOTED

PROCESS SYSTEMS INTERNATIONAL, INC.
20 WALKUP DR WESTBOROUGH, MASSACHUSETTS 01581 USA

TESTING COVER, 44" I.D. X 50.0" B.C.
GROOVED WITH 6" PORT
LIGO VACUUM EQUIPMENT

CAD FILE: V0494198
SIZE: D
DWG NO: V049-4-198
REV: 0

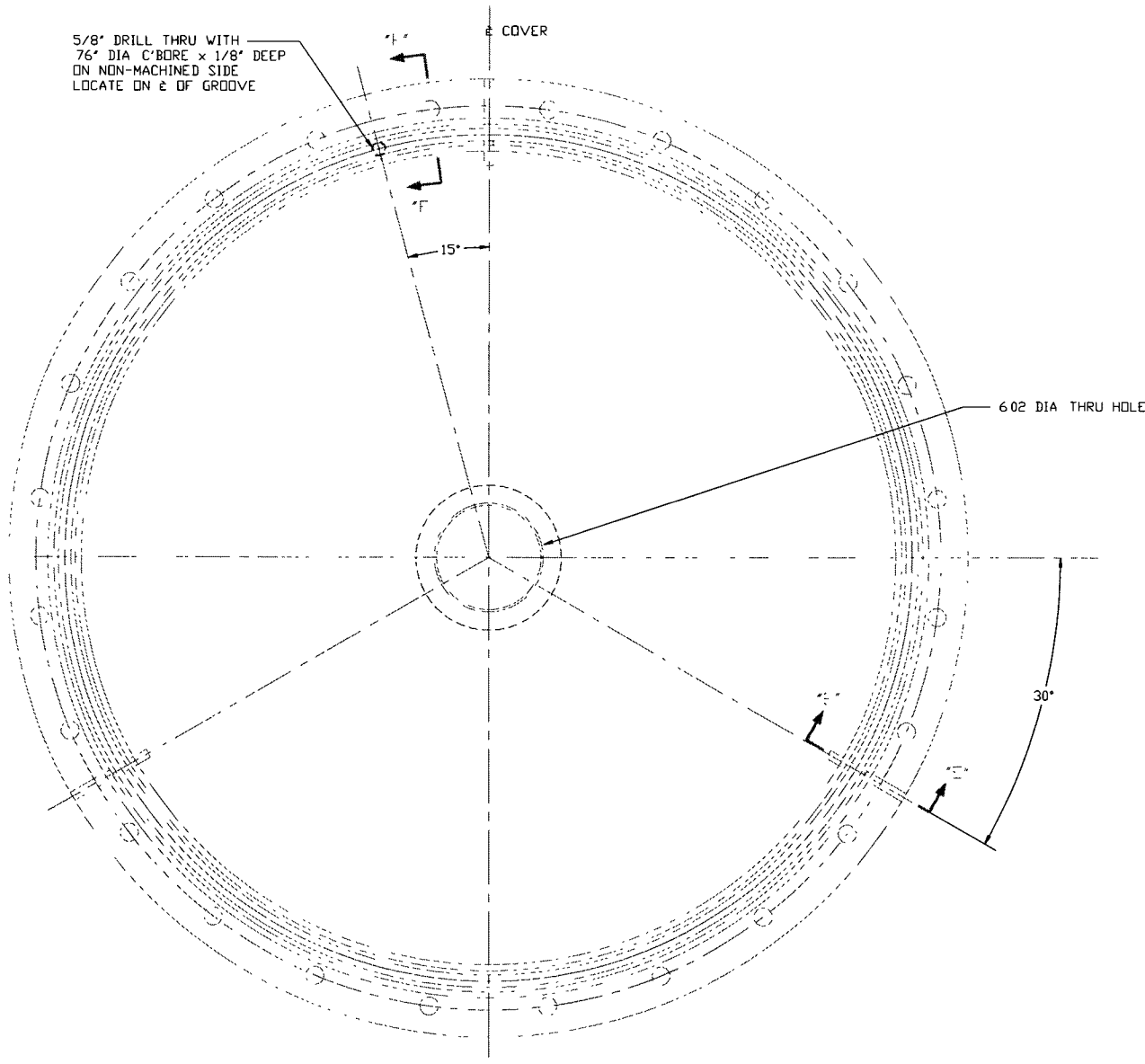
SCALE: AS NOTED
SHEET: 1 OF 2

EDUCATION VERSION - NOT FOR COMMERCIAL USE

MAY 15, 1998 - 16:36:01

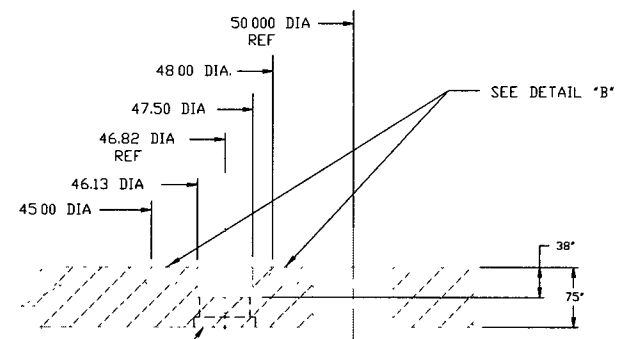
5/8" DRILL THRU WITH
7/64" DIA C'BORE x 1/8" DEEP
ON NON-MACHINED SIDE
LOCATE ON E OF GROOVE

COVER



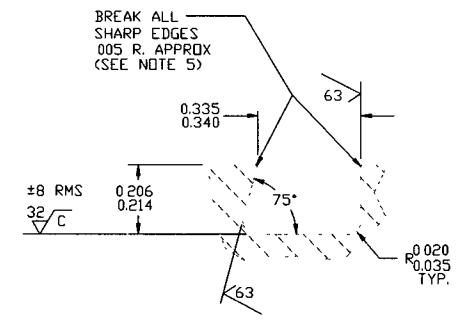
ELEVATION
(LOOKING AT MACHINED SIDE)
SCALE: 3'-1'-0"

NOTE: ALSO SEE ELEVATIONS ON SHT. 1 OF 2 FOR
ADDITIONAL MACHINING REQUIREMENTS

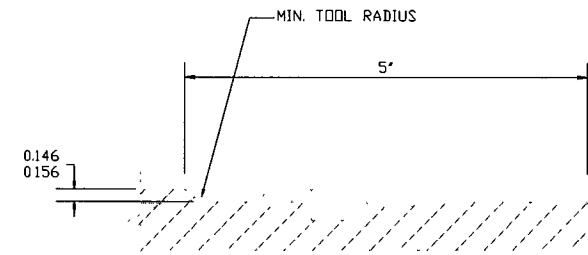


.76" DIA. C'BORE x 1/8" DEEP
(1) PLACE
REF.

SECTION "F-F"
TYP. (2) PLC'S
SCALE: 1=1



DETAIL "B"
TYP. (2) PLC'S
SCALE: 4X



SECTION "E-E"
TYP. (3) PLC'S
SCALE: 1=1

**ELECTRONIC
COPY**

SEE SHEET 1 FOR REVISIONS

PROCESS SYSTEMS INTERNATIONAL, INC. <small>20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA</small>			
TESTING COVER 44" I.D. X 50.0" B.C. GROOVE MACHINING			
LIGO VACUUM EQUIPMENT			
CAD FILE 419BS2	SIZE D	DWG NO. V049-4-198	REV 0
SCALE AS NOTED	SHEET 2 OF 2		

MAY 19, 1998 - 135756

EDUCATION VERSION - NOT FOR COMMERCIAL USE