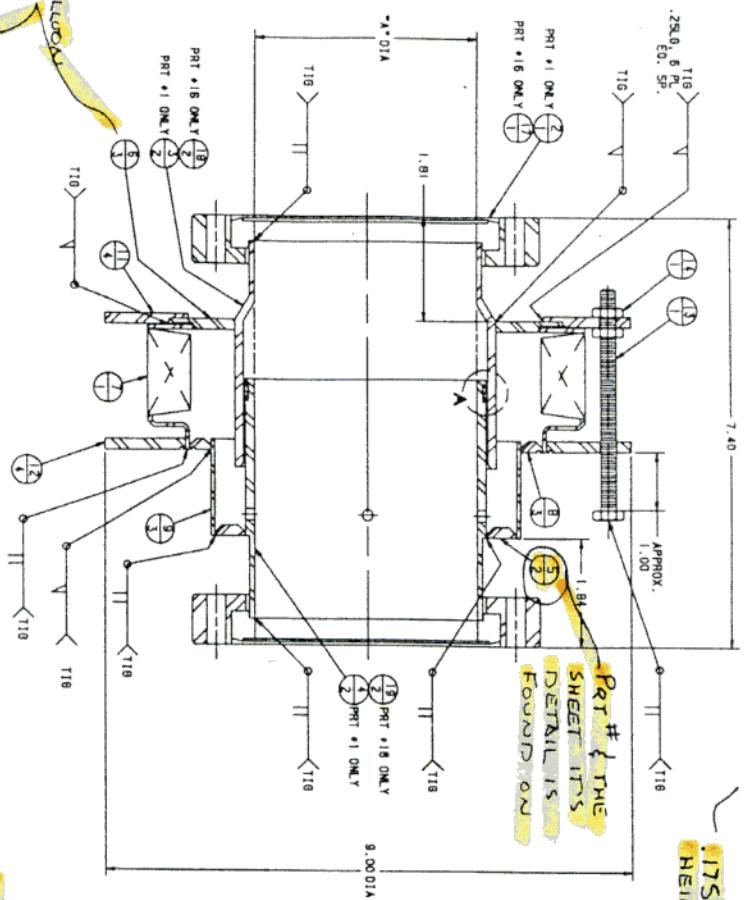


(DVT 3-11-92)

DETAILING OF PURCHASED PARTS

FINGER STOCK INSTRUMENT SPECIALTIES
 INSTRUMENT SPECIALTIES
 BERTHUM COPPER COIL SPRING
 OR EQUIV. (CUT LENGTH TO FIT)
 QTY: 1 REQ'D
 SCALE: 3:1



Part # of the SHEET IT'S FOUND ON

1 (D-6046-229-01)
 3.810 I.D. FLEXIBLE FLANGE BELLOWS ASM.
 MTL: AS NOTED
 QTY: 1 REQ'D
 NOTES: 1) "A" DIMENSION = 3.810 I.D.
 2) ALL WELDS TO CONFORM TO ULTRA HIGH VACUUM SPECIFICATIONS.
 3) WELD IN BONDAGE!

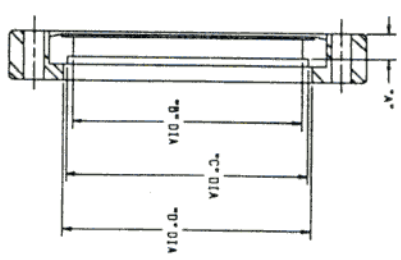
16 (D-6046-229-01)
 3.500 I.D. FLEXIBLE FLANGE BELLOWS ASM. .5 CELL CAVITY
 MTL: AS NOTED
 QTY: 1 REQ'D
 NOTES: 1) "A" DIMENSION = 3.500 I.D.
 2) ALL WELDS TO CONFORM TO ULTRA HIGH VACUUM SPECIFICATIONS.
 3) WELD IN BONDAGE!

175 CHARACTER HEIGHT

175 CHARACTER HEIGHT

2 (D-6046-229-01)
 FLANGE - 3.810 I.D. ASM.
 MTL: MAKE FROM MC #7800000R OR EQUIV.
 QTY: 2 REQ'D
 NOTES: 1) "A" DIMENSION = 4.37 DIA.
 2) "B" DIMENSION = 3.810 DIA.
 3) "C" DIMENSION = 4.010 DIA.
 4) "D" DIMENSION = 4.125 DIA.

17 (D-6046-229-01)
 FLANGE - 3.500 I.D. ASM.
 MTL: MAKE FROM MC #7800000R OR EQUIV.
 QTY: 2 REQ'D
 NOTES: 1) "A" DIMENSION = 4.37 DIA.
 2) "B" DIMENSION = 3.500 DIA.
 3) "C" DIMENSION = 4.010 DIA.
 4) "D" DIMENSION = 4.125 DIA.



REF TO CAP FILE NAME, EXCLUDING REVISION LEVEL

140 CHARACTER HEIGHT

LEAK CHECK THIS SUB-ASM W/ FIXTURE
 -9 TO #8
 -8 TO #3
 ASSEMBLY FINGER STOCK AT THIS POINT ONTO ITEM #4, SLIDE ITEM #4 INTO #3 AND PROCEED TO NEXT STEP.
 -5 TO #1
 -4 TO #12
 -3 TO #6
 -2 TO #3
 -1 TO #19
 -10 TO #13 ONE END

LEAK CHECK THIS SUB-ASM W/ FIXTURE
 -9 TO #8
 -8 TO #18
 ASSEMBLY FINGER STOCK AT THIS POINT ONTO ITEM #19, SLIDE ITEM #19 INTO #18 AND PROCEED TO NEXT STEP.
 -5 TO #1
 -4 TO #12
 -3 TO #6
 -2 TO #3
 -1 TO #19
 -10 TO #13 ONE END

| REV | DATE | DESCRIPTION | QTY | REV |
|-----|-------|------------------------|-----|-----|
| 19 | SH. 2 | INNER TUBE | 1 | |
| 18 | SH. 2 | OUTER TUBE | 1 | |
| 17 | SH. 1 | FLANGE | 2 | |
| 16 | SH. 1 | FINGER STOCK SPRING | 1 | X |
| 15 | SH. 1 | 1/4-28 HEX NUT | 3 | 3 |
| 14 | SH. 1 | STOP PLATE I | 1 | 1 |
| 13 | SH. 1 | STOP PLATE II | 1 | 1 |
| 12 | SH. 4 | FINGER STOCK | 1 | 1 |
| 11 | SH. 3 | SUPPORT TUBE | 1 | 1 |
| 10 | SH. 3 | BELLOWS WELD RING | 1 | 1 |
| 9 | SH. 3 | BELLOWS | 1 | 1 |
| 8 | SH. 3 | BELLOWS MOUNTING PLATE | 1 | 1 |
| 7 | SH. 2 | TUBE WELD RING | 1 | 1 |
| 6 | SH. 2 | INNER TUBE | 1 | 1 |
| 5 | SH. 2 | OUTER TUBE | 1 | 1 |
| 4 | SH. 1 | FLANGE | 2 | 2 |
| 3 | SH. 1 | ASSEMBLY 3.810 I.D. | X | X |
| 2 | SH. 1 | ASSEMBLY 3.500 I.D. | X | X |
| 1 | SH. 1 | ASSEMBLY 3.810 I.D. | X | X |

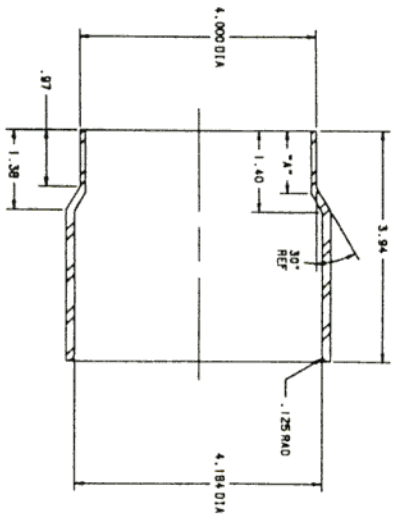
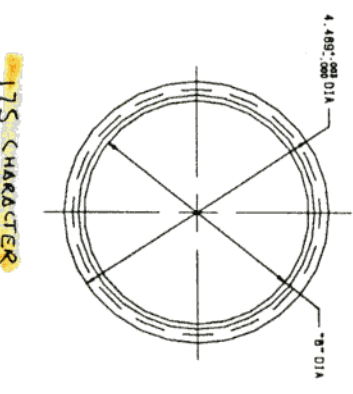
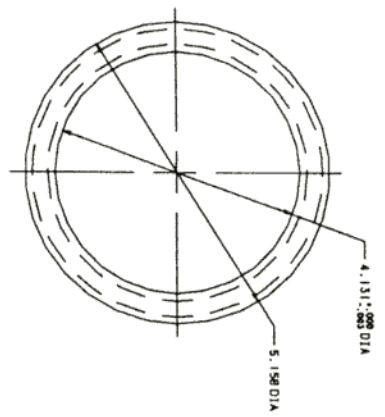
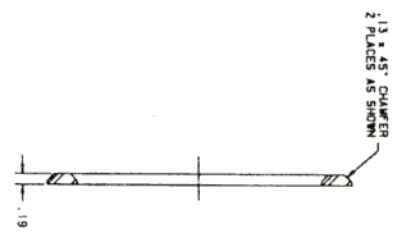
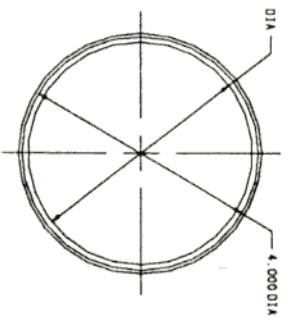
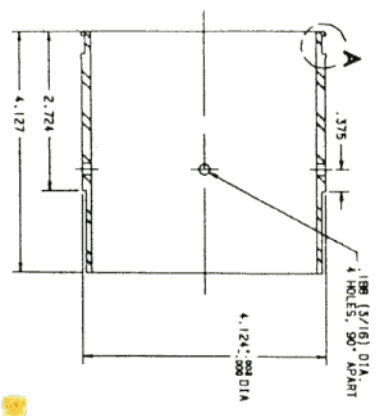
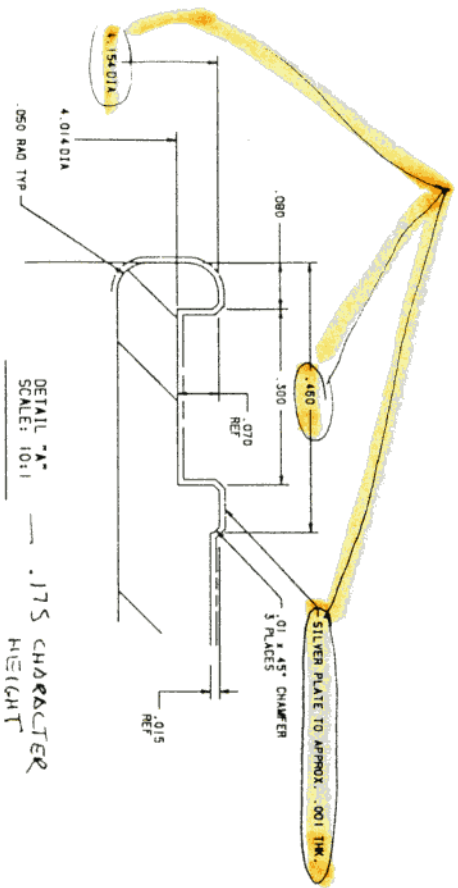
Part File Name: D-6046-229-01A
 Date: MARCH 10, 1992
 Drawing No: 6046-229
 Title: FLEXIBLE FLANGE BELLOWS ASSEMBLIES
 Drawing Date: 03/10/92
 Drawing By: [Signature]
 Drawing Check: [Signature]
 Drawing Appr: [Signature]
 Drawing Rev: [Signature]
 Drawing Scale: 1:1
 Drawing Unit: INCH
 Drawing Sheet: 1 of 1
 Drawing Part: 6046-229
 Drawing Rev: A

IF ASSEMBLY DWG. HAS A SEPARATE PARTS LIST (I.E. "A" SIZE PARTS LIST), ADD THE NOTE "SEE SEPARATE PARTS LIST" DIRECTLY ABOVE TITLE BLOCK.

CAD FILE NAME OF THIS SHEET IN WORDING REV. LEVEL & THE DATE THE PLOT WAS MADE

145

STANDARD CHARACTER HEIGHT FOR DIMENSIONS, NOTES, ETC. = .140



19 INNER TUBE - 3.810 I.D. ASM.
 DT: SCALE: 1:1
 MAT'L: 304 STN STL TUBING
 QTY: 1 REQ'D
 NOTES: 1) *A* DIMENSION = 3.810 DIA.

18 INNER TUBE - 3.500 I.D. ASM.
 DT: SCALE: 1:1
 MAT'L: 304 STN STL TUBING
 QTY: 1 REQ'D
 NOTES: 1) *A* DIMENSION = 3.500 DIA.

3 OUTER TUBE - 3.810 I.D. ASM.
 DT: SCALE: 1:1
 MAT'L: 4.500 I.D./3.750 I.D./ .375 WALL
 QTY: 1 REQ'D
 NOTES: 1) *A* DIMENSION = 1.07
 2) *B* DIMENSION = 3.810 DIA.

18 OUTER TUBE - 3.500 I.D. ASM.
 DT: SCALE: 1:1
 MAT'L: 4.500 I.D./3.250 I.D/.625 WALL
 QTY: 1 REQ'D
 NOTES: 1) *A* DIMENSION = .81
 2) *B* DIMENSION = 3.500 DIA.

REF TO CAD FILE NAMES,
 EXCLUDING REVISION LEVEL

CAD FILE NAME, INCLUDING REV LEVEL, OF THIS SHEET & THE DATE THE PLAT WAS MADE

| REV | DATE | DESCRIPTION | BY | CHKD |
|-----|------|---|-----|------|
| A | 0608 | ISSUE SILVER PLATE TO APPROX. .001 THK. | ... | ... |
| B | | MAJOR REVISIONS | | |

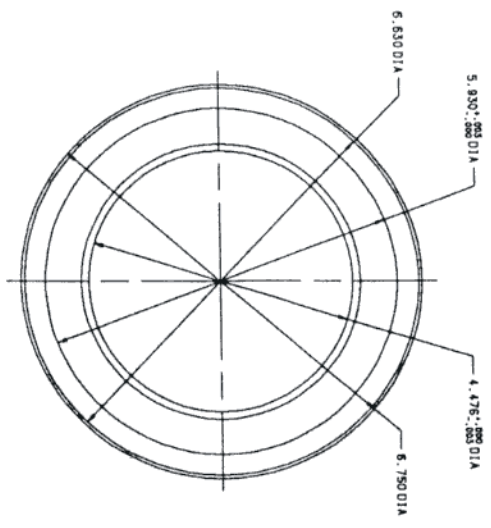
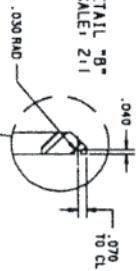
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| 1 | | | REF FILE NAME: SEARCH 10 - 1982 | | | | |
| 2 | | | CAD FILE NAME: D-6046-229-020 | | | | |
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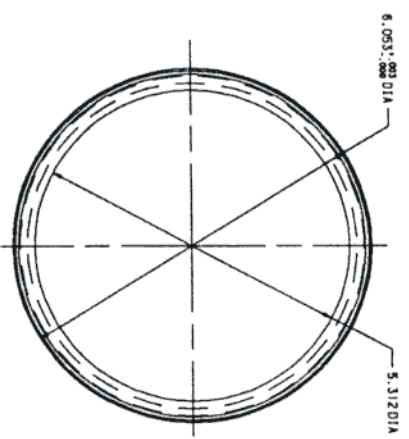
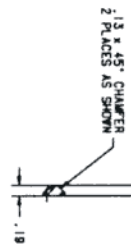
| ITEM | REV. | NO. | DESCRIPTION | QTY | UNIT | REMARKS | DATE |
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| REV | DATE | DESCRIPTION | BY | CHK |
|-----|------|----------------------------|----|-----|
| A | | GEN REV'S TO PARTS #6 & #8 | | |

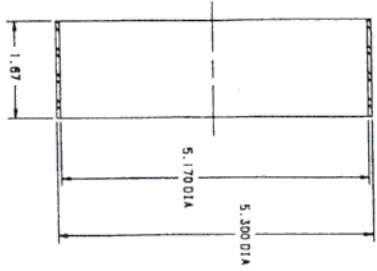
DETAIL "B"
SCALE: 2:1



6 BELLOWS MOUNTING PLATE
[D-8046-228-03]
DFT: SCALE: 1:1
MATERIAL: 304 STN STL
QTY: 1 REQ'D



8 BELLOWS WELD RING
[D-8046-229-03]
DFT: SCALE: 1:1
MATERIAL: 304 STN STL
QTY: 1 REQ'D



9 SUPPORT TUBE
[D-8046-228-03]
DFT: SCALE: 1:1
MATERIAL: 304 STN STL
QTY: 1 REQ'D

NOTES: IF MATERIAL IS ROLLED TO FORM TUBE, WELDING MUST BE COMPATIBLE WITH ULTIM HIGH YACOBAN.

| REV | DATE | DESCRIPTION | BY | CHK |
|-----|------|----------------------------|----|-----|
| D | | GEN REV'S TO PARTS #6 & #8 | | |

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| ITEM | REV. NO. | DESCRIPTION | QTY | REMARKS | REV |
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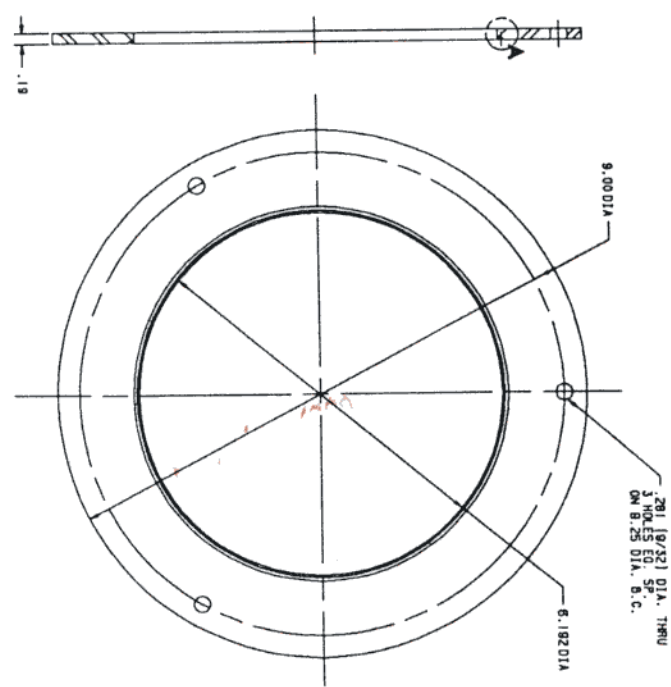
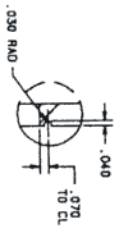
Cornell University
Floyd R. Schuman Laboratory of Nuclear Studies - Ithaca, NY 14853-200

FLEXIBLE FLANGE
BELLOWS ASSEMBLIES

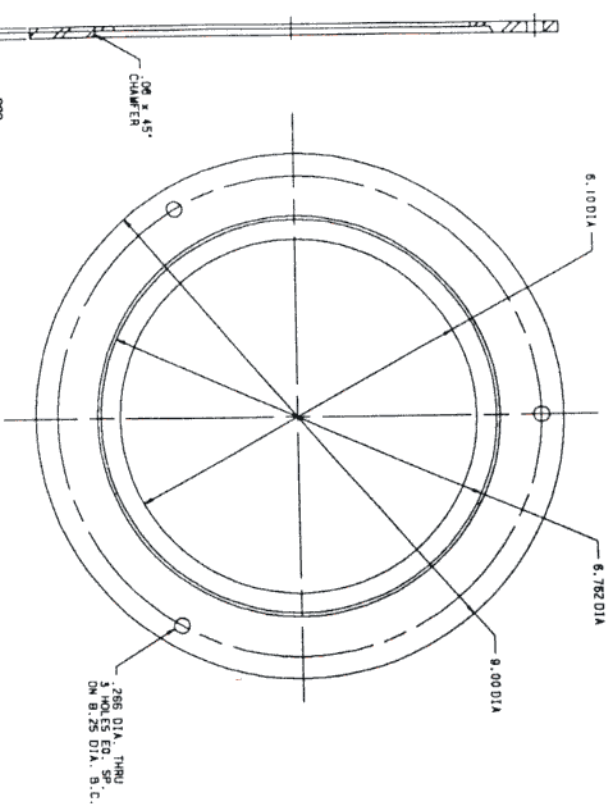
Part File Mark: D-8046-229-03A
Part File Mark: D-8046-229-03A

9 8 7 6 5 4 3 2 1

DETAIL "A"
SCALE: 2:1



12 STOP PLATE 11
 10-6046-229-041
 MAT'L: 304 STN. STL.
 QTY: 1 REQ'D



11 STOP PLATE 1
 10-6046-229-041
 MAT'L: 304 STN. STL.
 QTY: 1 REQ'D

| REVISIONS | | DATE | BY |
|-----------|---------|------|----|
| 1 | ISSUED | | |
| 2 | CHANGED | | |

| ITEM | QTY | SYM. NO. | DESCRIPTION | UNIT | REQ. QTY | REMARKS | REV. |
|------|-----|----------|---------------|------|----------|---------|------|
| D | 1 | | STOP PLATE 11 | | | | |
| A | 1 | | STOP PLATE 1 | | | | |

| | |
|-------------------|----------------|
| PROJECT FILE NAME | 3046-10-1982 |
| CDR FILE NAME | D-6046-229-041 |
| DATE | 1/15/81 |
| SCALE | 1:1 |
| SCALE | D 6046-229 |
| SCALE | 1:1 |

6046-229
 FLEXIBLE FLANGE
 BELLOWS ASSEMBLIES
 1/15/81
 SCALE 1:1
 D 6046-229
 SCALE 1:1
 1/15/81

CORNELL UNIVERSITY
 FRED R. MANN LABORATORY OF NUCLEAR SCIENCE - ITHACA, NY 14853-2501

9 8 7 6 5 4 3 2 1