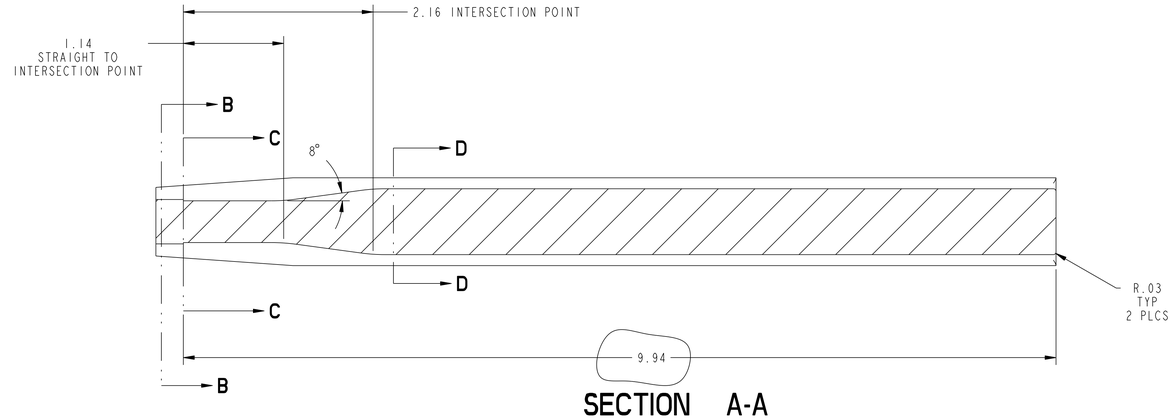
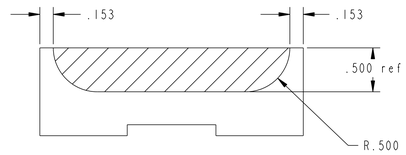
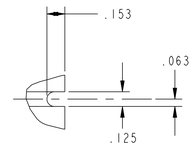
| NO. | REVISION | BY | CH | SUP | APPROVED | DATE |
|---|---|---|---|---|---|---|
| 1 | REVISED PER ECN NO.4785 | BP | MK | JS | J.CHRZANOWSKI | 7/22/03 |



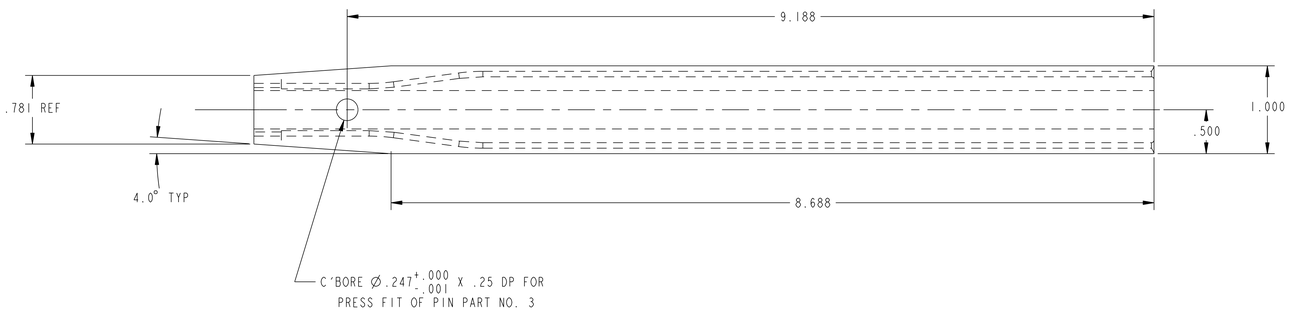

SECTION A-A

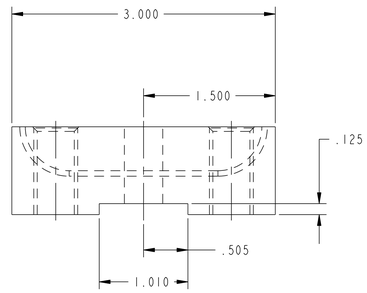


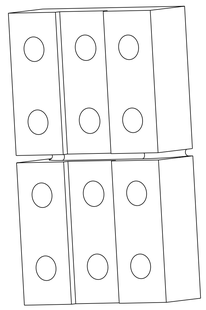

SECTION D-D



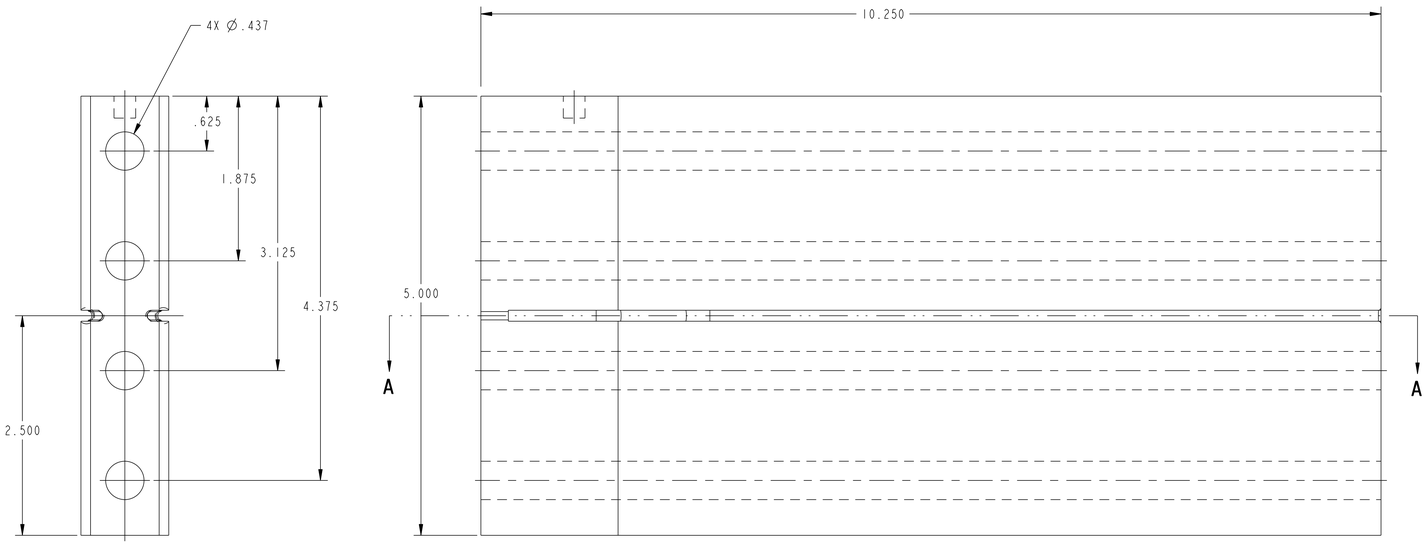

DETAIL E
SCALE 2.000



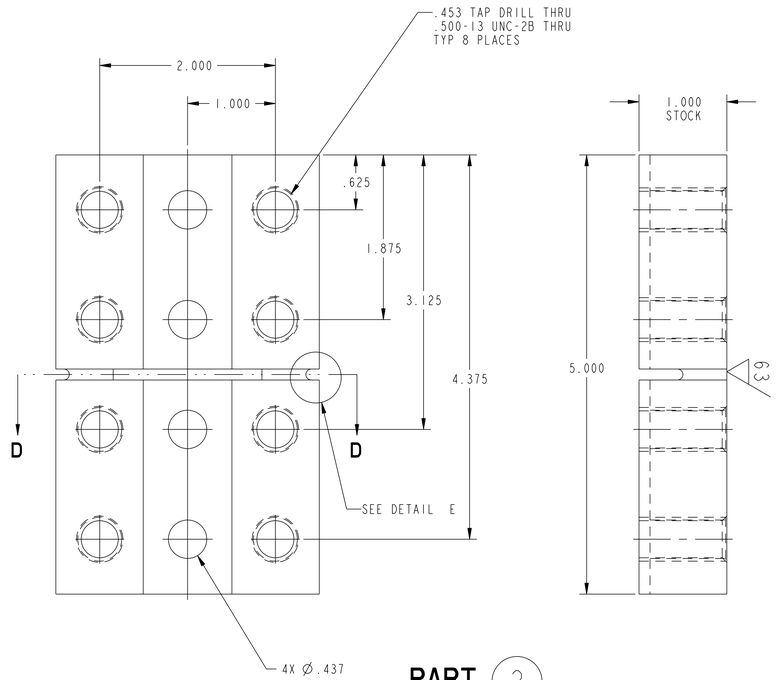



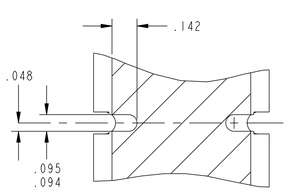
SLOT ISOMETRIC
SCALE 1.000



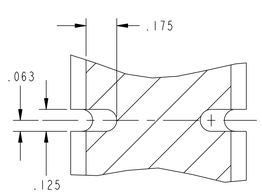

PART 1
NO. REQ'D : 48



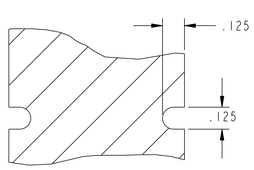

PART 2
NO. REQ'D : 48




SECTION B-B
SCALE 3.000




SECTION C-C
SCALE 3.000




SECTION D-D
SCALE 3.000

| 03 | 02 | 01 | PART NO. | DRAWING NO | NOMENCLATURE OR DESCRIPTION | MATERIAL |
|---|---|---|---|---|---|---|
| | | 8 | 4 | COMM | KEENSERT NO. KNL616 SEE SHEET 2 | 303 CRES |
| | | 1 | 3 | THIS DRW | FLAG ALIGNMENT PIN SEE SHEET 2 | 304SS |
| | | 1 | 2 | THIS DRW | FLAG END | COPPER CDA 104,105 OR 107 |
| | | 1 | 1 | THIS DRW | OUTER FLAG LEG | COPPER CDA 104,105 OR 107 |
| | | X | --- | THIS DRW | OUTER FLAG ASSEMBLY SEE SHEET 2 | ------ |

ASS QTY — PARTS LIST

COMPUTER GENERATED DRAWING
MANUAL CHANGES NOT PERMITTED

Pro E

DO NOT VERIFY INFORMATION BY SCALING DRAWING

CENTRAL FILES:
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
MACHINE SURFACES 63
BREAK SHARP EDGES .005/.020
TOLERANCES NON-CUMULATIVE

NEXT ASSEMBLY

| DECIMAL-INCH | | FRACTIONS | |
|---|---|---|---|
| .X | ±.100 | 0°-12° | ±1/4 |
| .XX | ±.030 | 12°-72° | ±1/8 |
| .XXX | ±.005 | 72°-120° | ±1/4 |
| ANGULAR | 10'-15' | OVER 120° | ±1/2 |

PRINCETON PLASMA PHYSICS LABORATORY
PRINCETON UNIVERSITY
NATIONAL SPHERICAL TORUS EXPERIMENT
TF CORE
OUTER FLAG ASSEMBLY
WELDMENT AND FINAL MACHINING

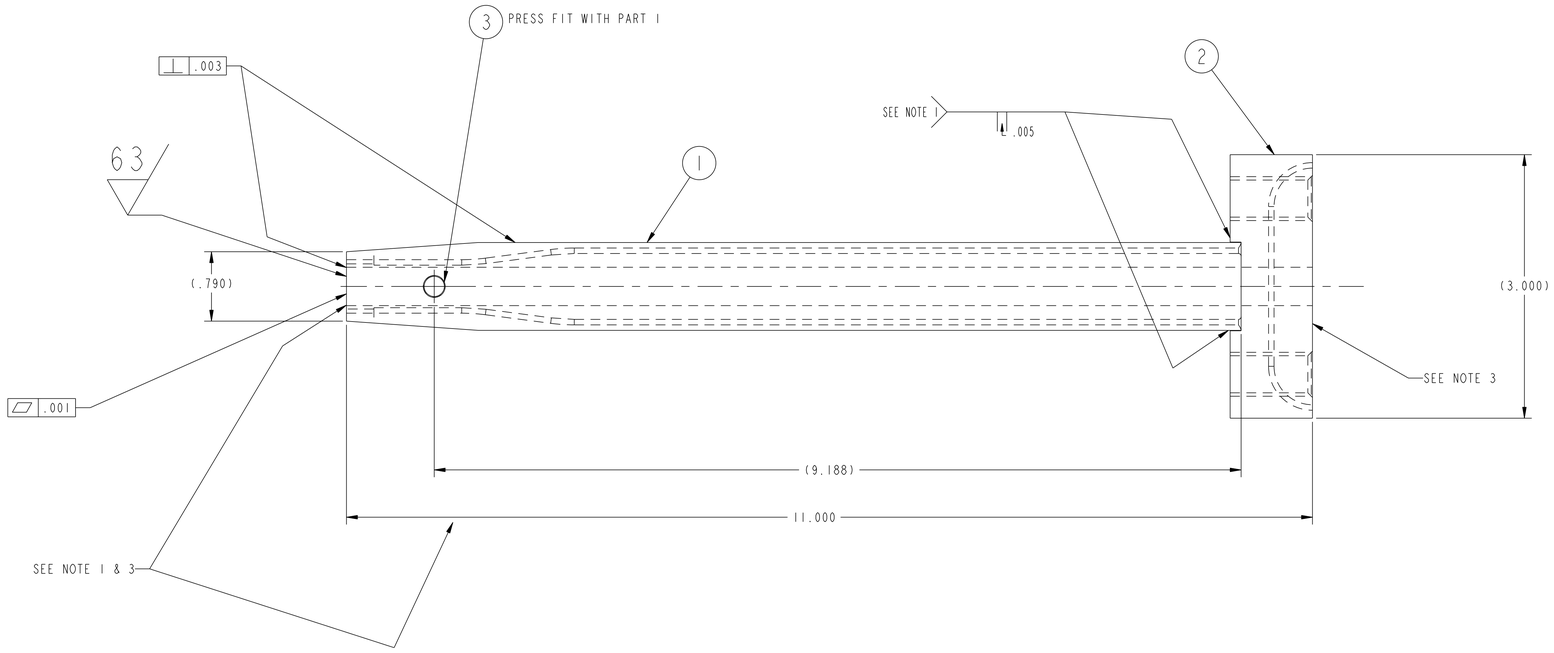
DIV: MECH. ENG.
DATE: 6/25/03
CADD FILE: E-DC1294 .DRW
ENG: J. CHRZANOWSKI
DSN: C. PRINISKI, B. PAUL
APPROVED: J.CHRZANOWSKI
CHK: M. KALISH
CHK MK SUPV JS
E-DC1294
SHEET 1 OF 2
REV 1

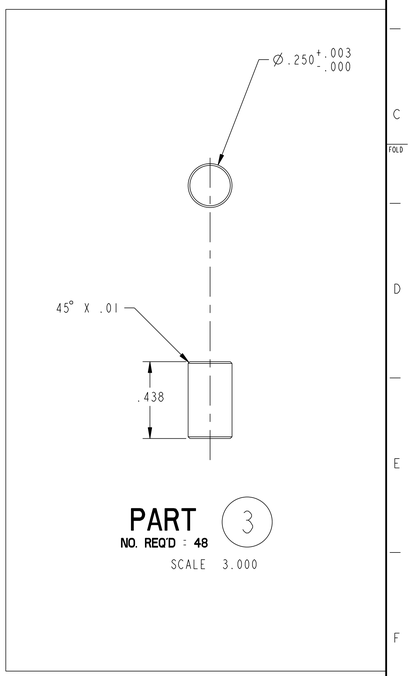
WELDING ENGINEER
APPVD: _____ DATE

NSTX-E-DC1294

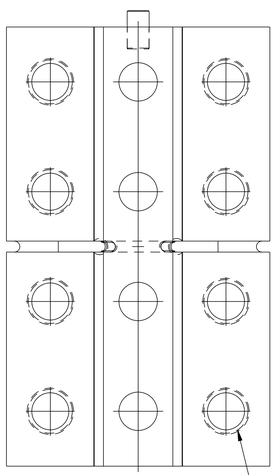
EMI

| NO. | REVISION | BY | CH | SUP | APPROVED | DATE |
|---|---|---|---|---|---|---|
| 1 | REVISED PER ECN NO.4785 | BP | MK | JS | J.CHRZANOWSKI | 7/22/03 |

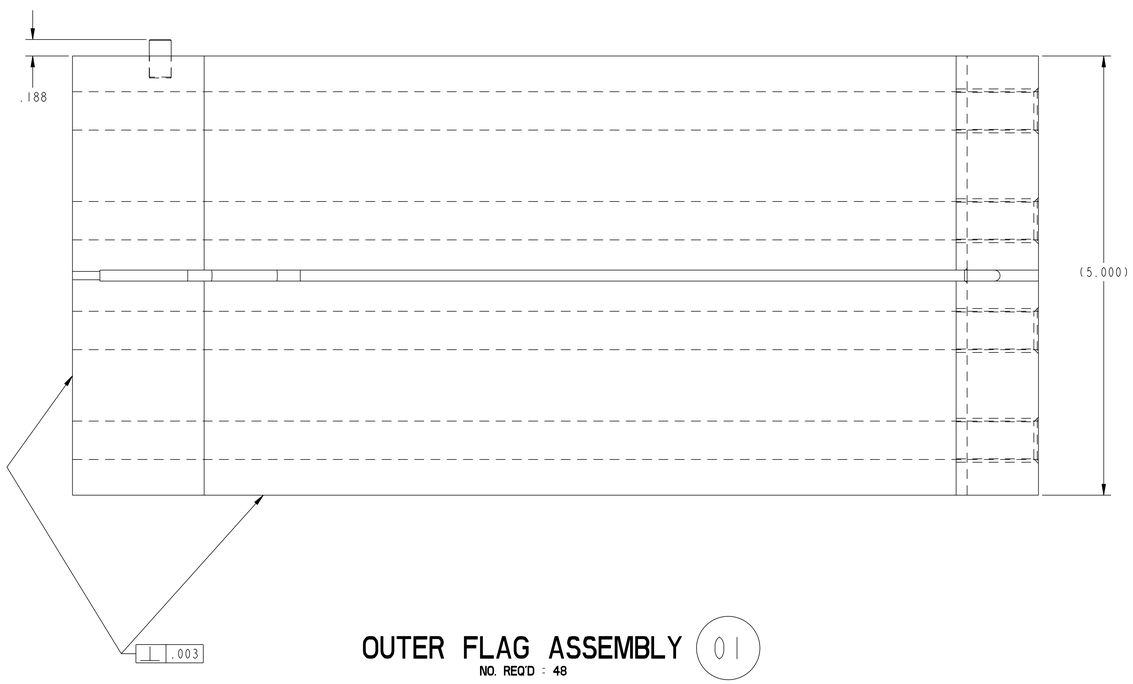



**PART** 3
NO. REQ'D : 48
SCALE 3.000



4 SEE NOTE 2




**OUTER FLAG ASSEMBLY** 01
NO. REQ'D : 48

## NOTES

1. MACHINE ELECTRICAL CONTACT FACE OF PART 1 TO 63 FINISH AFTER BRAZING OF PARTS 1 & 2.
2. KEENSERTS TO BE INTALLED BEFORE ELECTRICAL CONTACT FACES ARE SILVER PLATED. KEENSERTS ARE TO BE RECESSED .06 BELLOW ELECTRICAL CONTACT FACE.
3. SILVER PLATE ELECTRICAL CONTACT FACES.
4. INSULATION TO BE (2) HALF-LAPPED LAYERS OF KAPTON TAPE
5. BRAZING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF PPPL PROCEDURE NO. EM-002.

WELDING ENGINEER
APPVD: R.PARSELLS DATE 6/26/03

| | | | |
|---|---|---|---|
| COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED | CENTRAL FILES: UNLESS OTHERWISE SPECIFIED | PRINCETON PLASMA PHYSICS LABORATORY<br>PRINCETON UNIVERSITY<br>NATIONAL SPHERICAL TORUS EXPERIMENT<br>TF CORE<br>OUTER FLAG ASSEMBLY<br>WELDMENT AND FINAL MACHINING | |
| Pro E | DIMENSIONS ARE IN INCHES MACHINE SURFACES 63 | | |
| DO NOT VERIFY INFORMATION BY SCALING DRAWING | BREAK SHARP EDGES .005/.020 | | |
| | TOLERANCES NON-CUMULATIVE | DIV: MECH. ENG. DATE: 6/25/03 | CADD FILE: E-DC1294 .DRW |
| NEXT ASSEMBLY | DECIMAL-INCH: .X ±.100, .XX ±.030, .XXX ±.005, ANGULAR ±0°-15'<br>FRACTIONS: 0°-12° ±1/16, 12°-72° ±1/8, 72°-120° ±1/4, OVER 120° ±1/2 | ENG: J.CHRZANOWSKI<br>DSN: C. PRINISKI B. PAUL<br>CHK: M. KALISH | APPROVED J.CHRZANOWSKI<br>CHK MK SUPV JS |
| | | | E-DC1294 |
| | | | SHEET 2 OF 2 REV 1 |

EMI

NSTX-E-DC1294