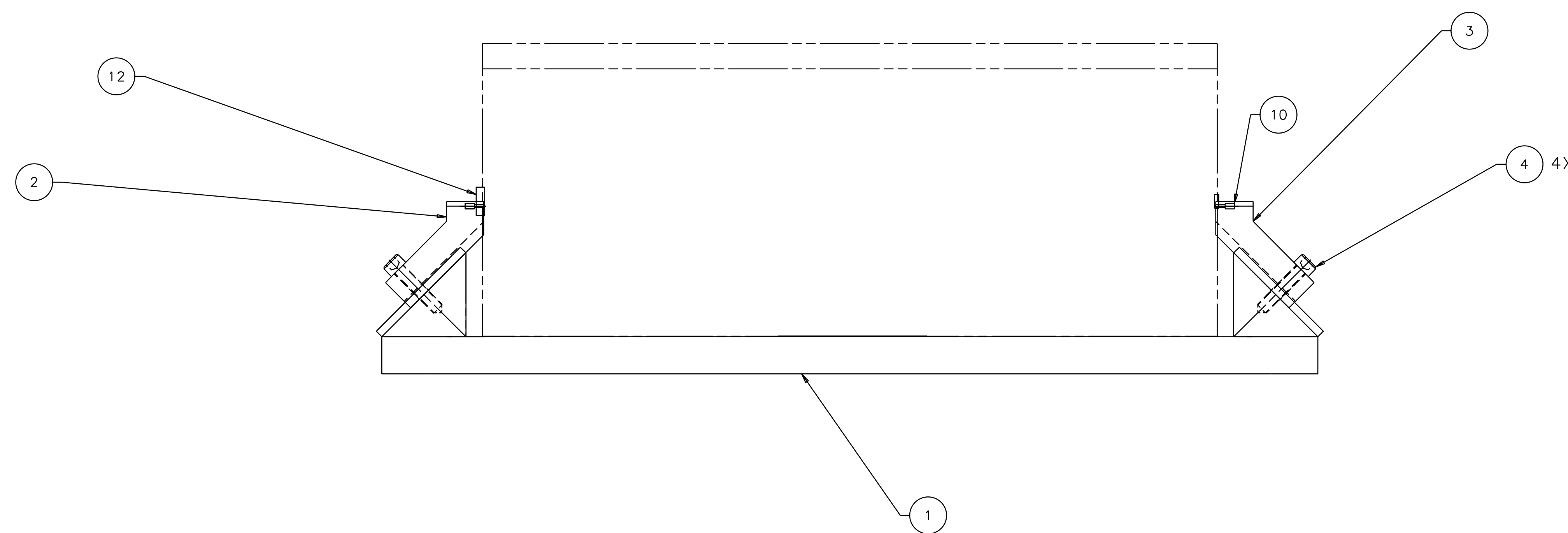
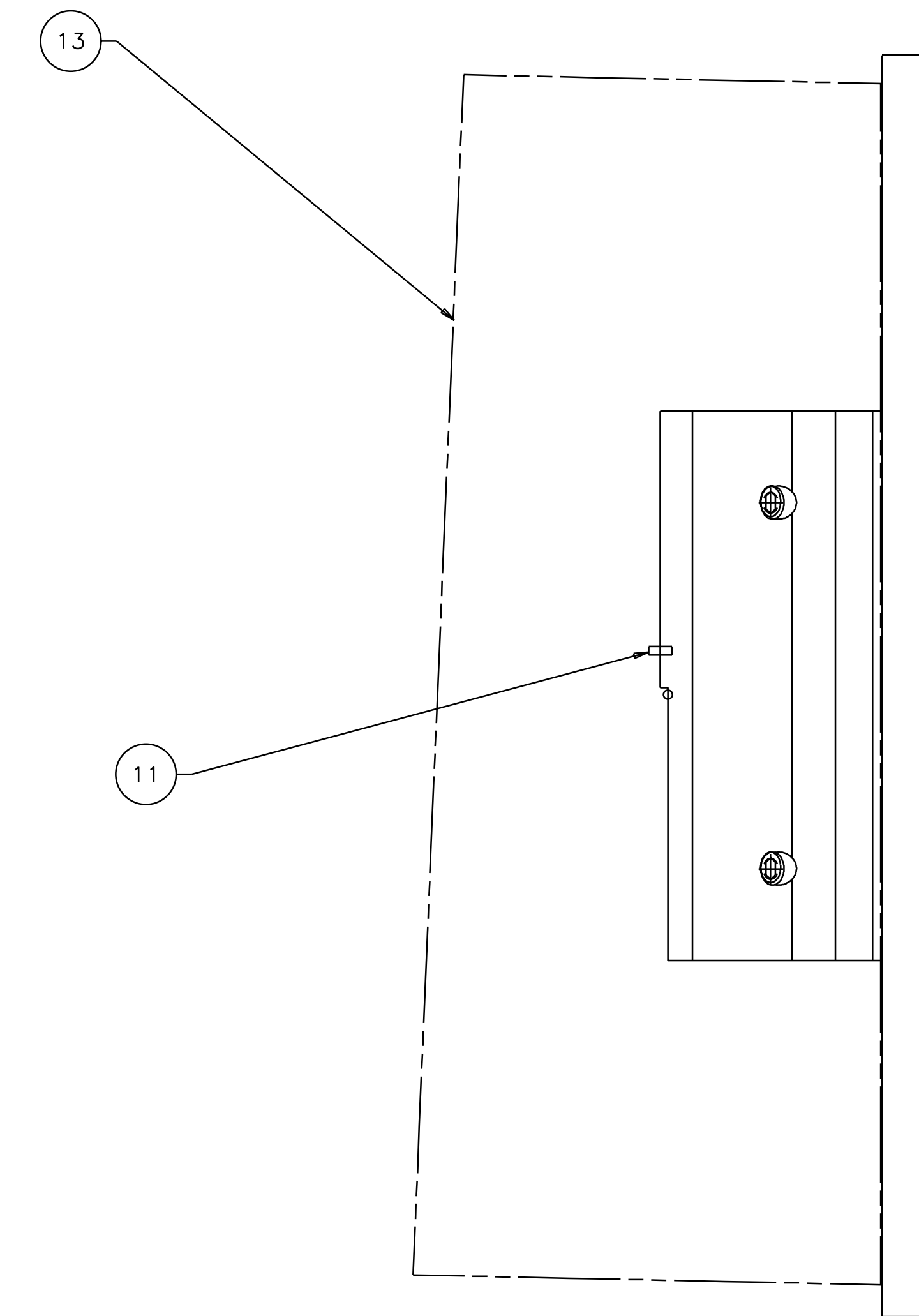
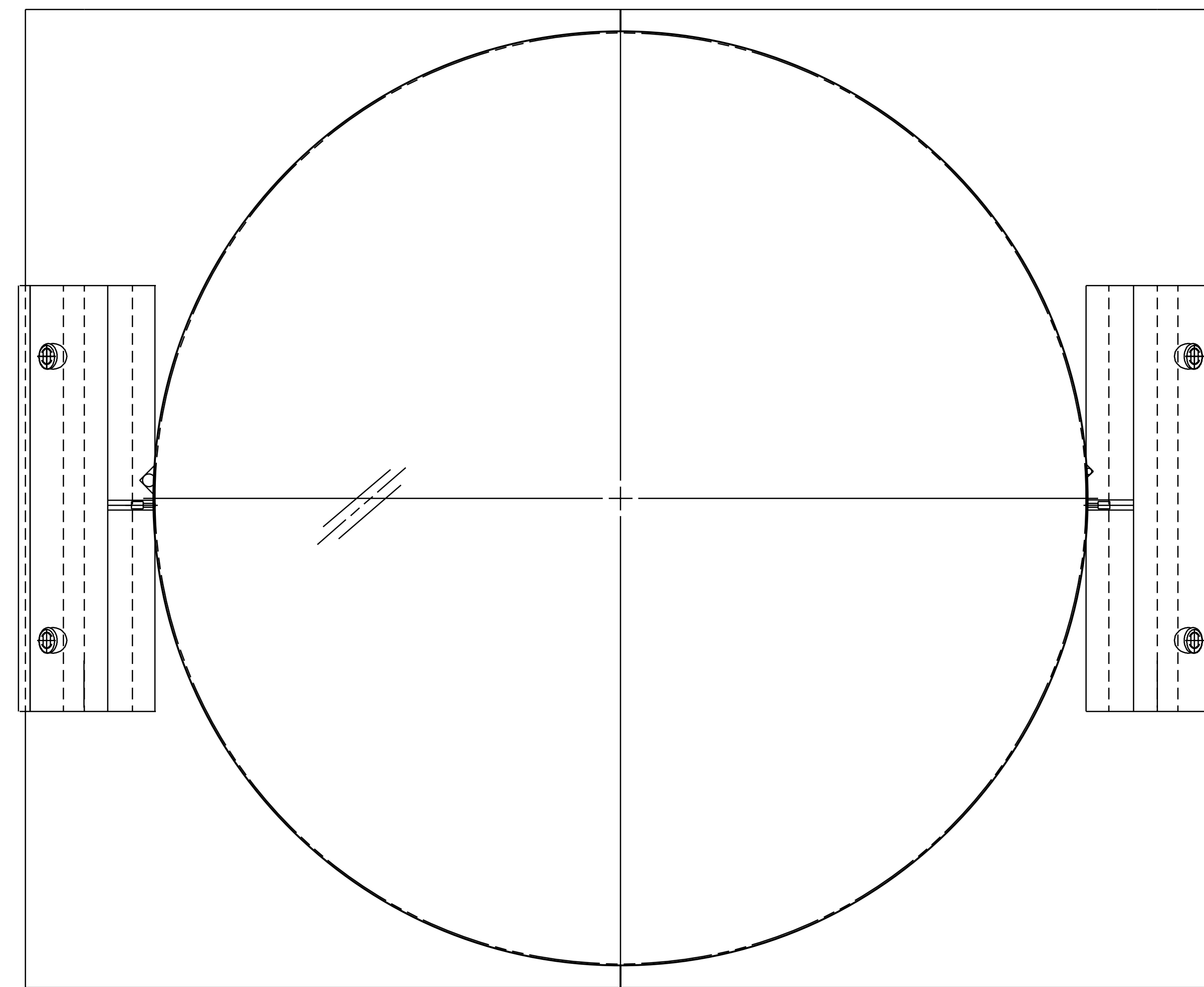


1 2 3 4 5 6 7 8

| REV | DATE    | DRAWN BY | CHECKED | DC | DCN/DESCRIPTION         |
|-----|---------|----------|---------|----|-------------------------|
| A   | 8-14-98 | J. Romie |         |    | E980220/INITIAL RELEASE |

- NOTES: (UNLESS OTHERWISE SPECIFIED)
1. THIS FIXTURE IS TO BE USED WITH AN OPTIC THAT IS  $\phi 9.84"$  X  $3.94"$  THICK ( $\phi 25\text{cm}$  X  $10\text{cm}$  THICK) THICK-SIDE-DOWN ORIENTED WEDGE. CLOSE SLIP FIT.
  2. THE RIGHT BLOCK, TOP IS USED TO MOUNT THE GUIDE ROD AND THE LEFT BLOCK, TOP IS USED TO MOUNT THE WIRE STANDOFF.
  3. USE OF THIS FIXTURE IS COVERED IN LIGO-E970154.
  4. SPECIFICATIONS COVERING THE FABRICATION OF THIS ASSEMBLY ARE DETAILED IN LIGO-E970155, THE LARGE OPTIC SUSPENSION (LOS) FIXTURES AND COMPONENTS FABRICATION SPECIFICATION.



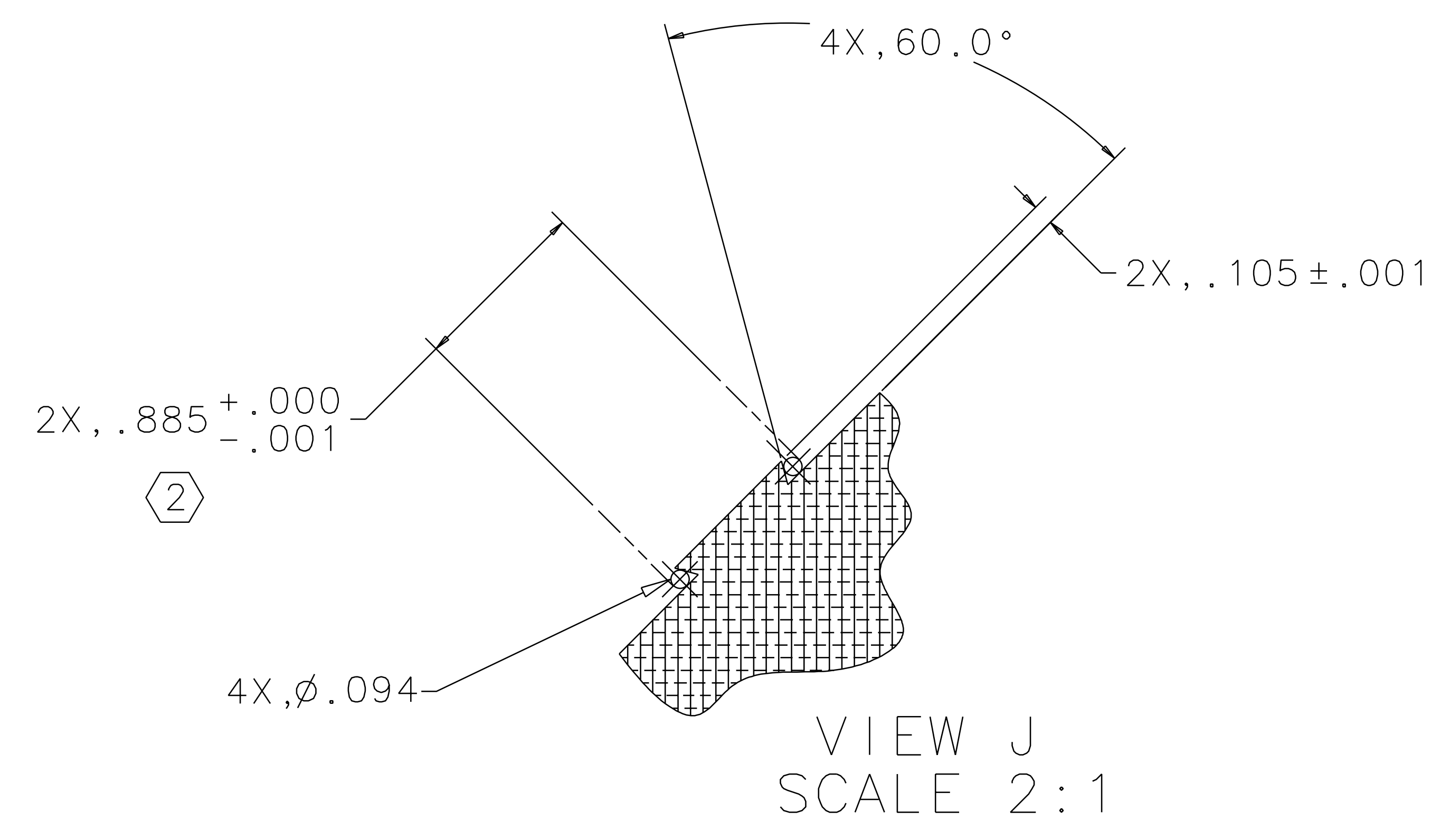
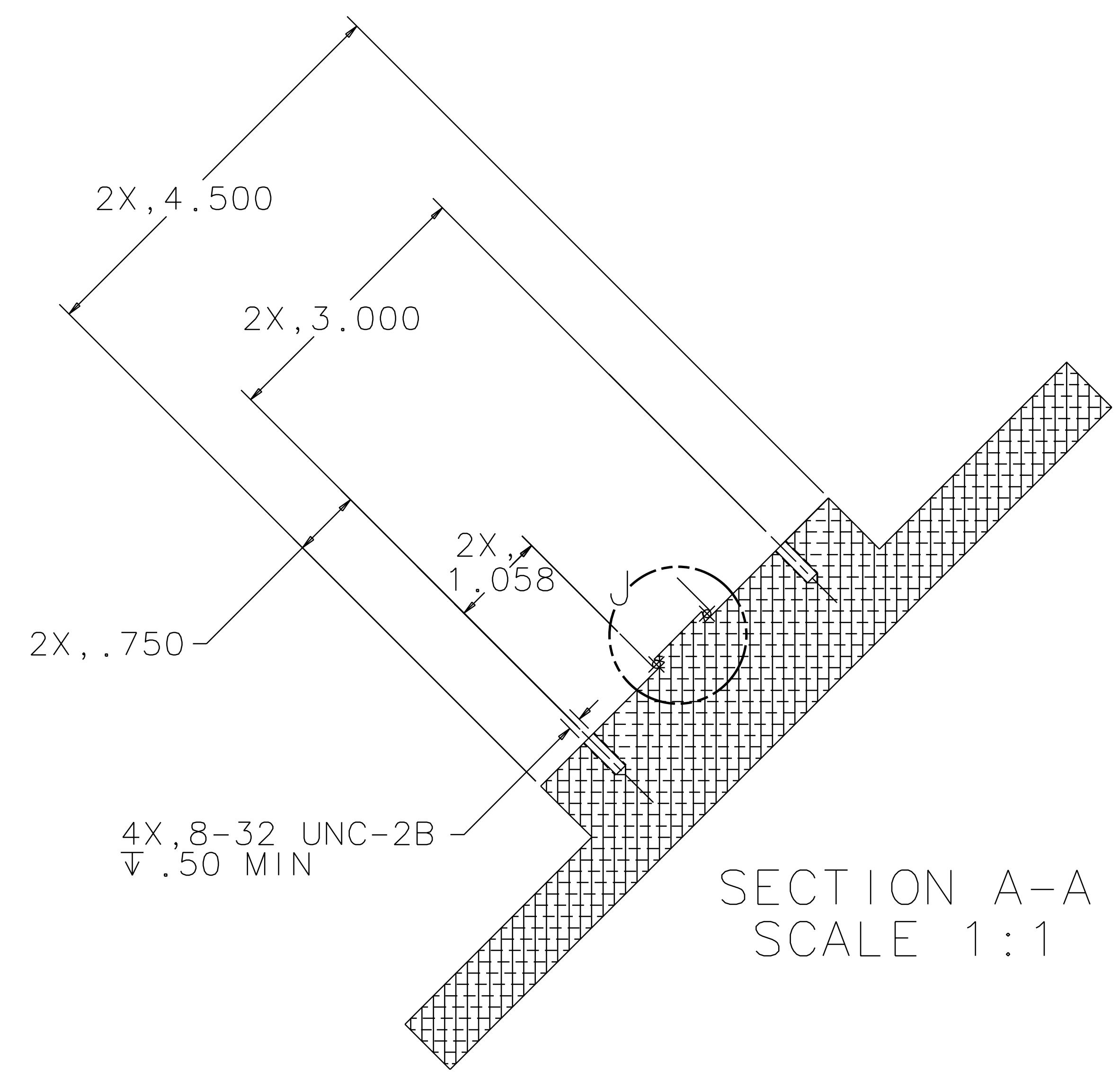
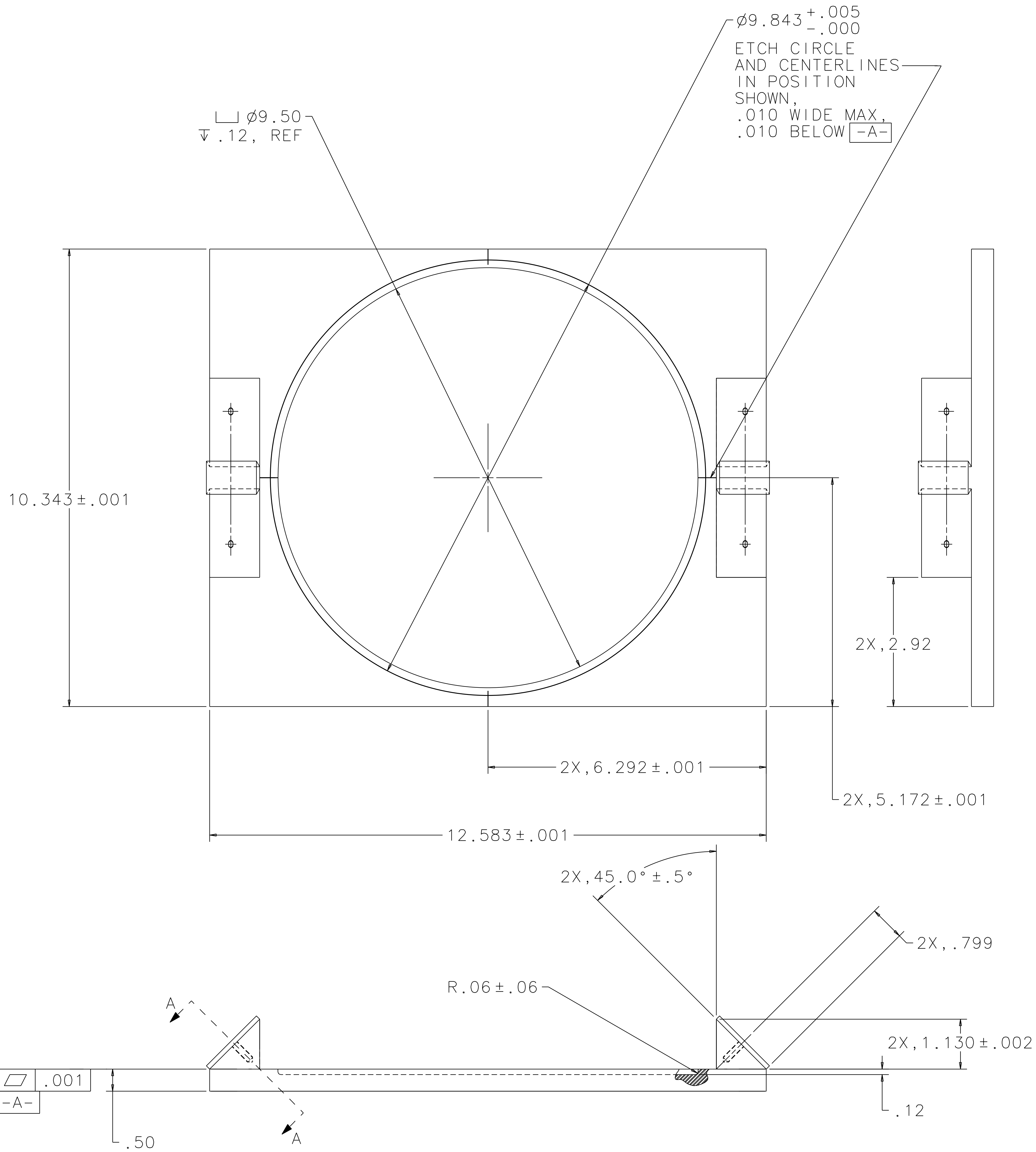
| REF | QTY | PART OR IDENTIFYING NO | NOMENCLATURE OR DESCRIPTION | MATERIAL SPECIFICATION | ITEM NO |
|-----|-----|------------------------|-----------------------------|------------------------|---------|
|     |     |                        | OPTIC, RECYCLING MIRROR     |                        | 13      |
|     |     |                        | WIRE STANDOFF               |                        | 12      |
|     |     |                        | GUIDE ROD                   |                        | 11      |
|     |     |                        | MAGNET/STANDOFF ASSEMBLY    |                        | 10      |
|     |     |                        |                             |                        | 9       |
|     |     |                        |                             |                        | 8       |
|     |     |                        |                             |                        | 7       |
|     |     |                        |                             |                        | 6       |
|     |     |                        |                             |                        | 5       |
| 4   |     |                        | SCREW, SHCS, #8-32 x .75    | STAINLESS STEEL        | 4       |
| 1   |     |                        | RIGHT BLOCK, TOP            |                        | 3       |
| 1   |     |                        | LEFT BLOCK, TOP             |                        | 2       |
| 1   |     |                        | BASE PLATE                  |                        | 1       |

|                                                     |           |      |                                         |
|-----------------------------------------------------|-----------|------|-----------------------------------------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | APPROVALS | DATE | LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY |
| TOLERANCES ARE:                                     |           |      | MASSACHUSETTS INSTITUTE OF TECHNOLOGY   |
| FRACTIONS DECIMALS ANGLES                           |           |      |                                         |
| 0. XX±0.01                                          | DRAWN     | 8/98 | TITLE                                   |
| 0. XXX±0.005                                        | J. Romie  |      | GUIDE ROD FIXTURE,                      |
| ANGLES±0.5°                                         | CHECKED   |      | RECYCLING MIRRORS                       |
| DO NOT SCALE DRAWING                                |           |      |                                         |
| NEXT ASSEMBLY                                       | MATERIAL  |      | SIZE                                    |
| D970564, D970577                                    |           |      | E D970568                               |
| FILE LOCATION                                       | FINISH    |      | SCALE                                   |
| /home/dcc/docs/D970568.pdf                          |           |      | NONE                                    |
|                                                     |           |      | SHEET 1 OF 3                            |

1 2 3 4 5 6 7 8

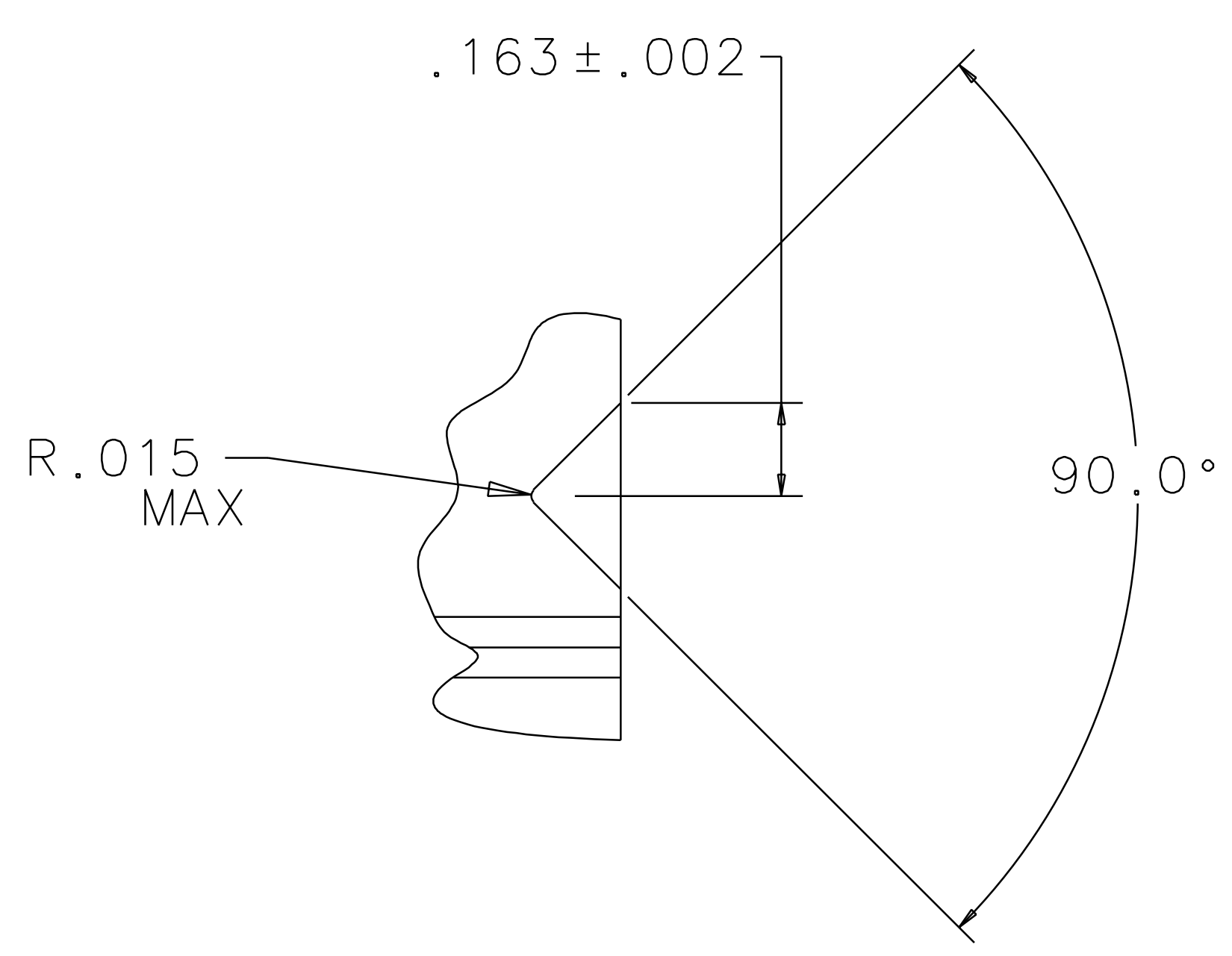
| REV | DATE    | DRAWN BY | CHECKED | DCC | DCN/DESCRIPTION         |
|-----|---------|----------|---------|-----|-------------------------|
| A   | 8-14-98 | J. Romie |         |     | E980220/INITIAL RELEASE |



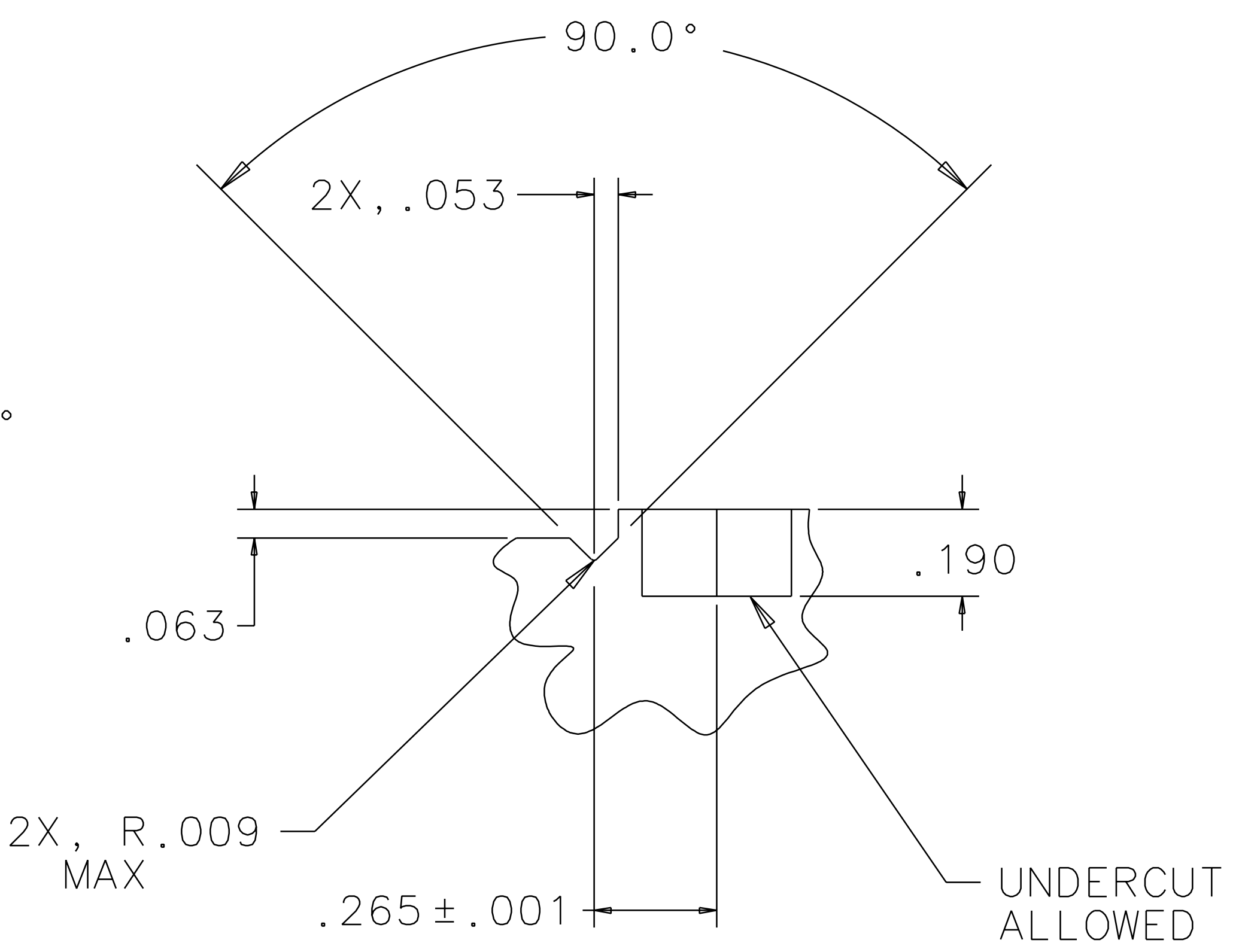
BASE PLATE  
MATERIAL: 6061-T6 ALUM

| QTY REQ                                                                                                                                                                                  | PART OR IDENTIFYING NO | NOMENCLATURE OR DESCRIPTION | MATERIAL SPECIFICATION                                                           | ITEM NO. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------|----------------------------------------------------------------------------------|----------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>FRACTIONS DECIMALS ANGLES<br>0.XX $\pm$ 0.01<br>0.XXX $\pm$ 0.005<br>ANGLES $\pm$ 0.5°<br>DO NOT SCALE DRAWING |                        |                             |                                                                                  |          |
| APPROVALS                                                                                                                                                                                |                        | DATE                        | LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY<br>MASSACHUSETTS INSTITUTE OF TECHNOLOGY |          |
| DRAWN<br>J. Romie                                                                                                                                                                        |                        | 8/98                        | TITLE<br>GUIDE ROD FIXTURE,<br>RECYCLING MIRRORS                                 |          |
| CHECKED                                                                                                                                                                                  |                        |                             | SIZE<br>E D970568                                                                |          |
| MATERIAL                                                                                                                                                                                 |                        |                             | REV<br>A                                                                         |          |
| FINISH                                                                                                                                                                                   |                        |                             | SCALE<br>1/1                                                                     |          |
| NEXT ASSEMBLY                                                                                                                                                                            |                        |                             | SHEET 2 OF 3                                                                     |          |
| FILE LOCATION                                                                                                                                                                            |                        |                             |                                                                                  |          |

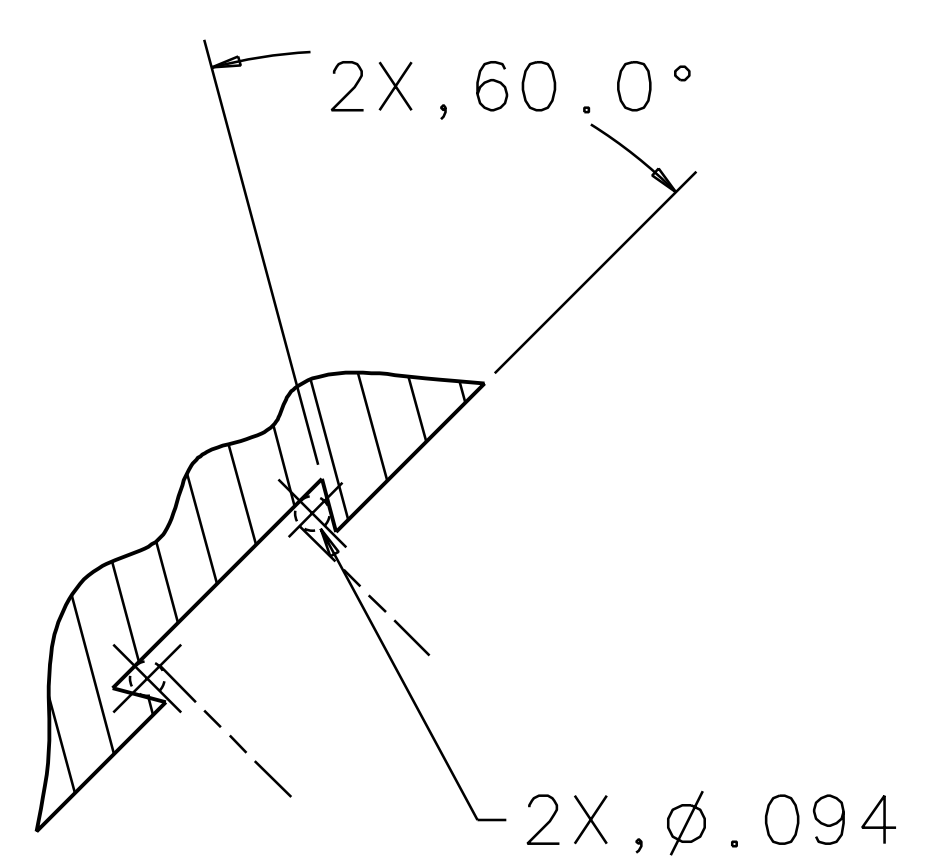
| REV | DATE    | DRAWN BY | CHECKED | DCC | DCN/DESCRIPTION         |
|-----|---------|----------|---------|-----|-------------------------|
| A   | 8-14-98 | J. Romie |         |     | E980220/INITIAL RELEASE |



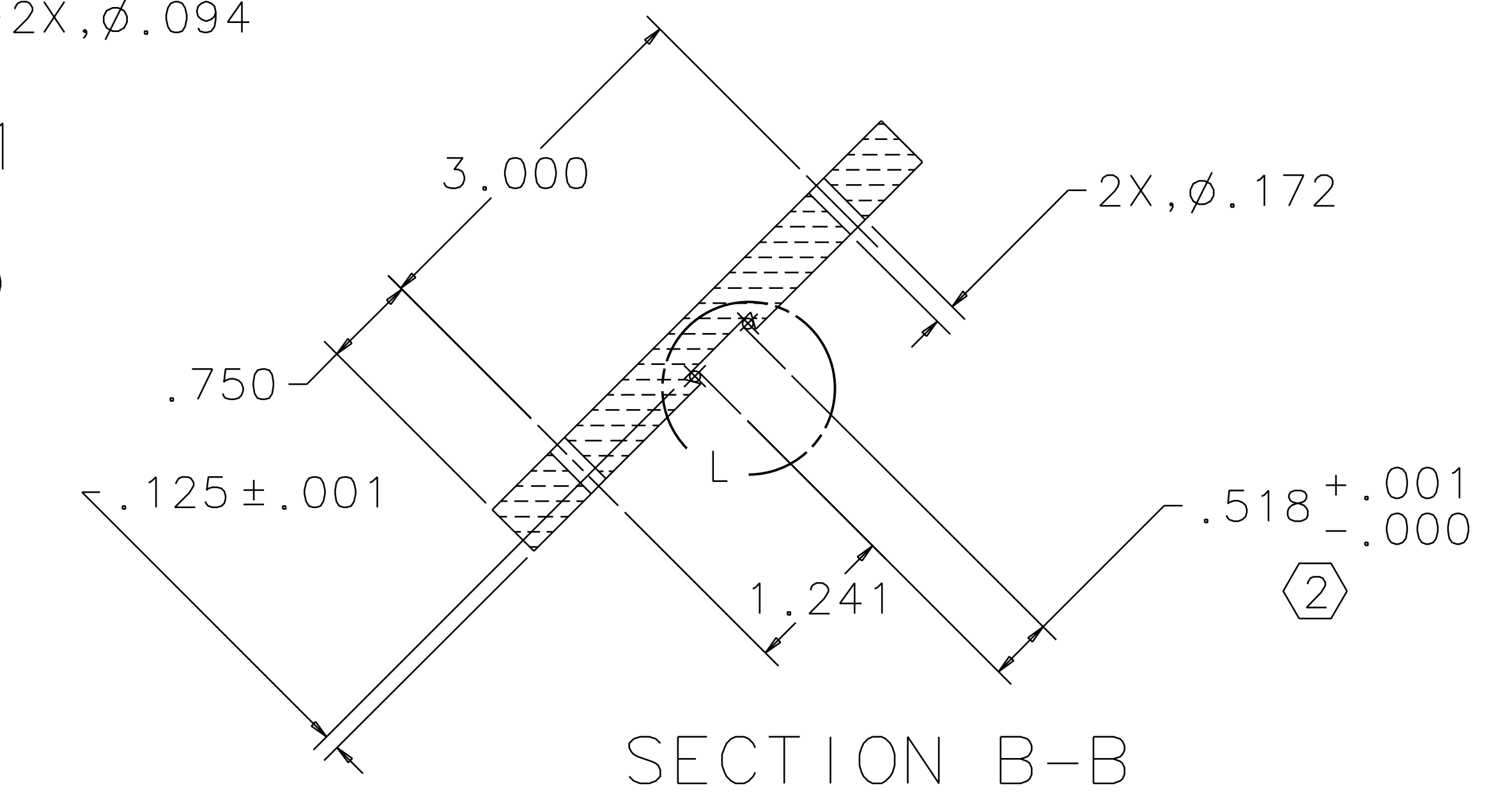
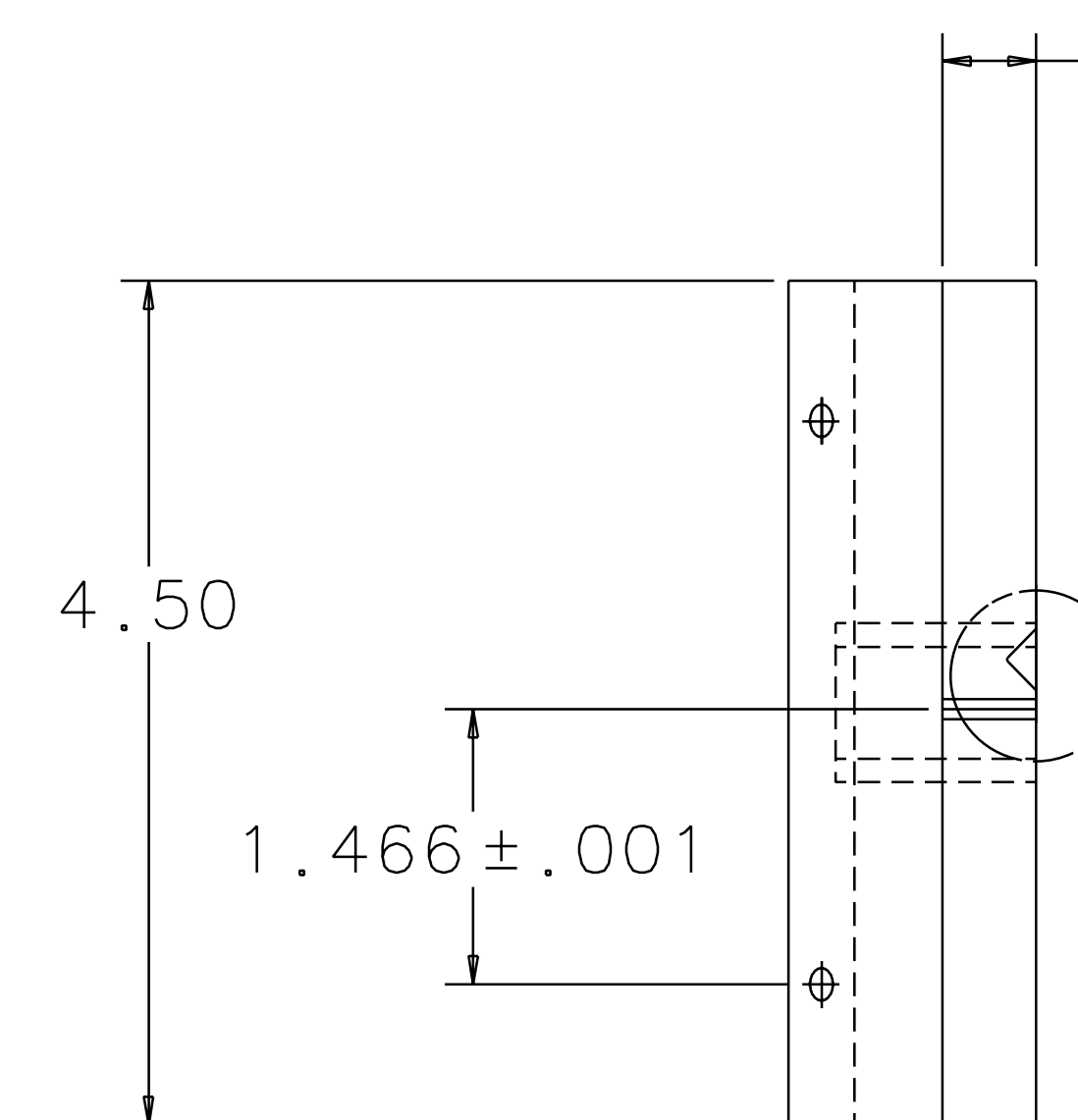
VIEW C  
SCALE 4:1



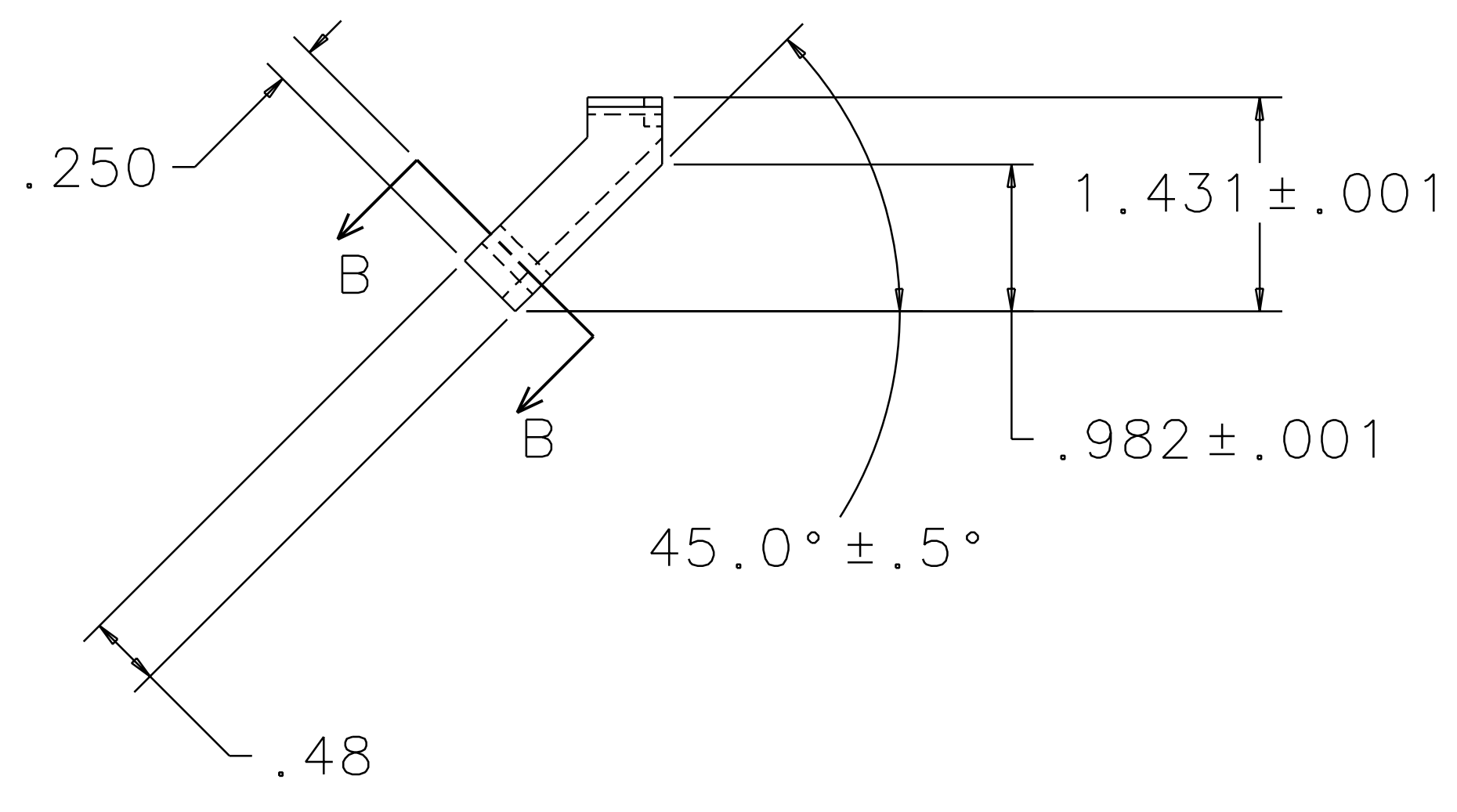
VIEW D  
SCALE 4:1



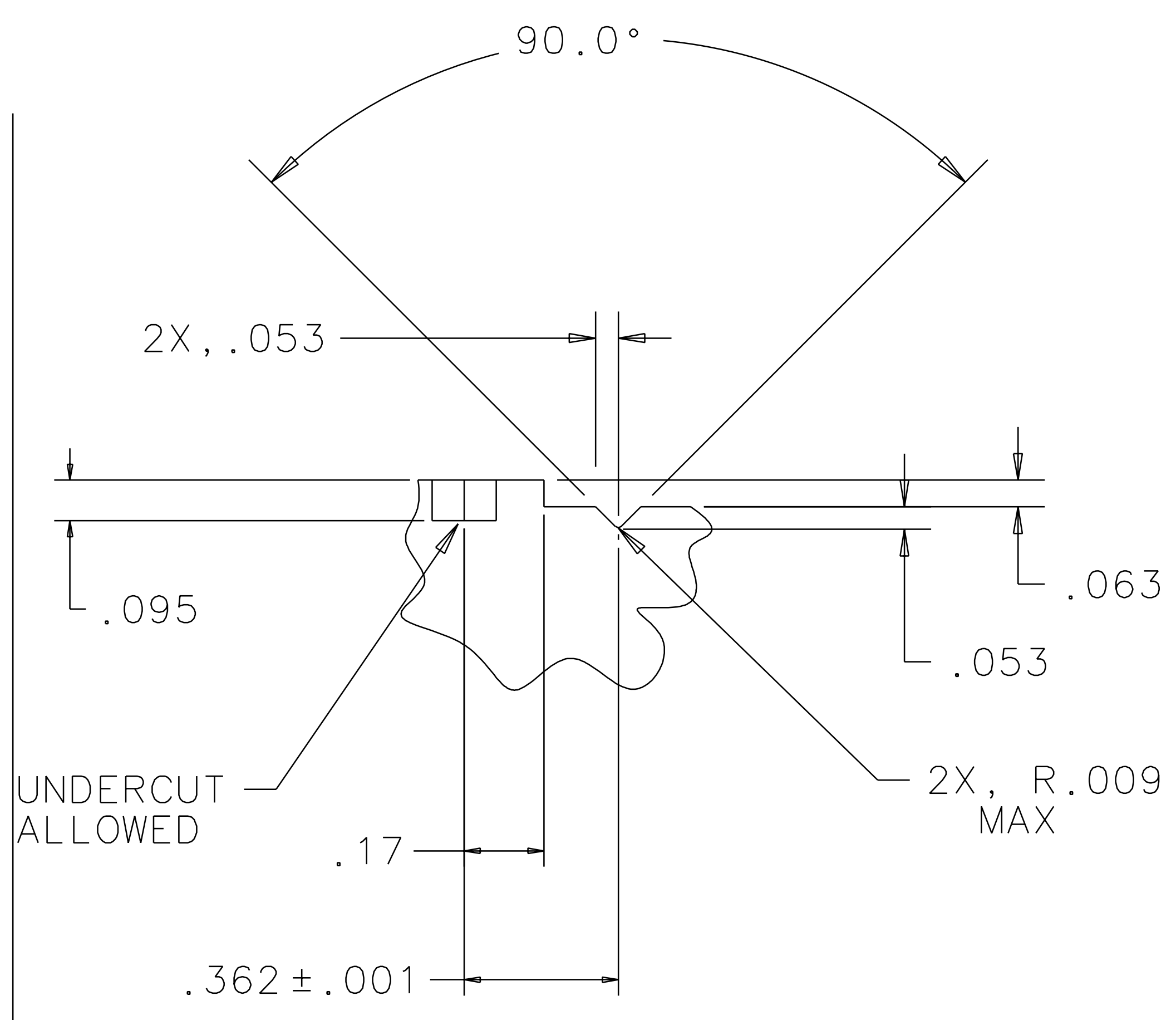
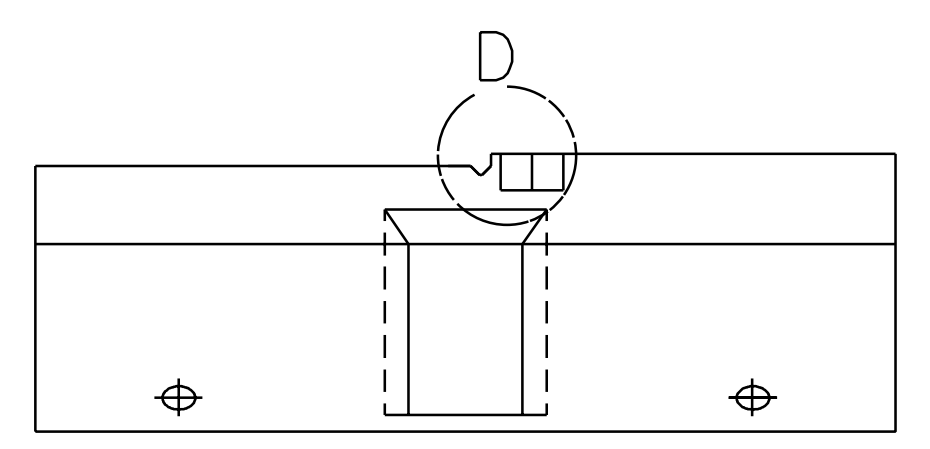
VIEW L  
SCALE 2:1



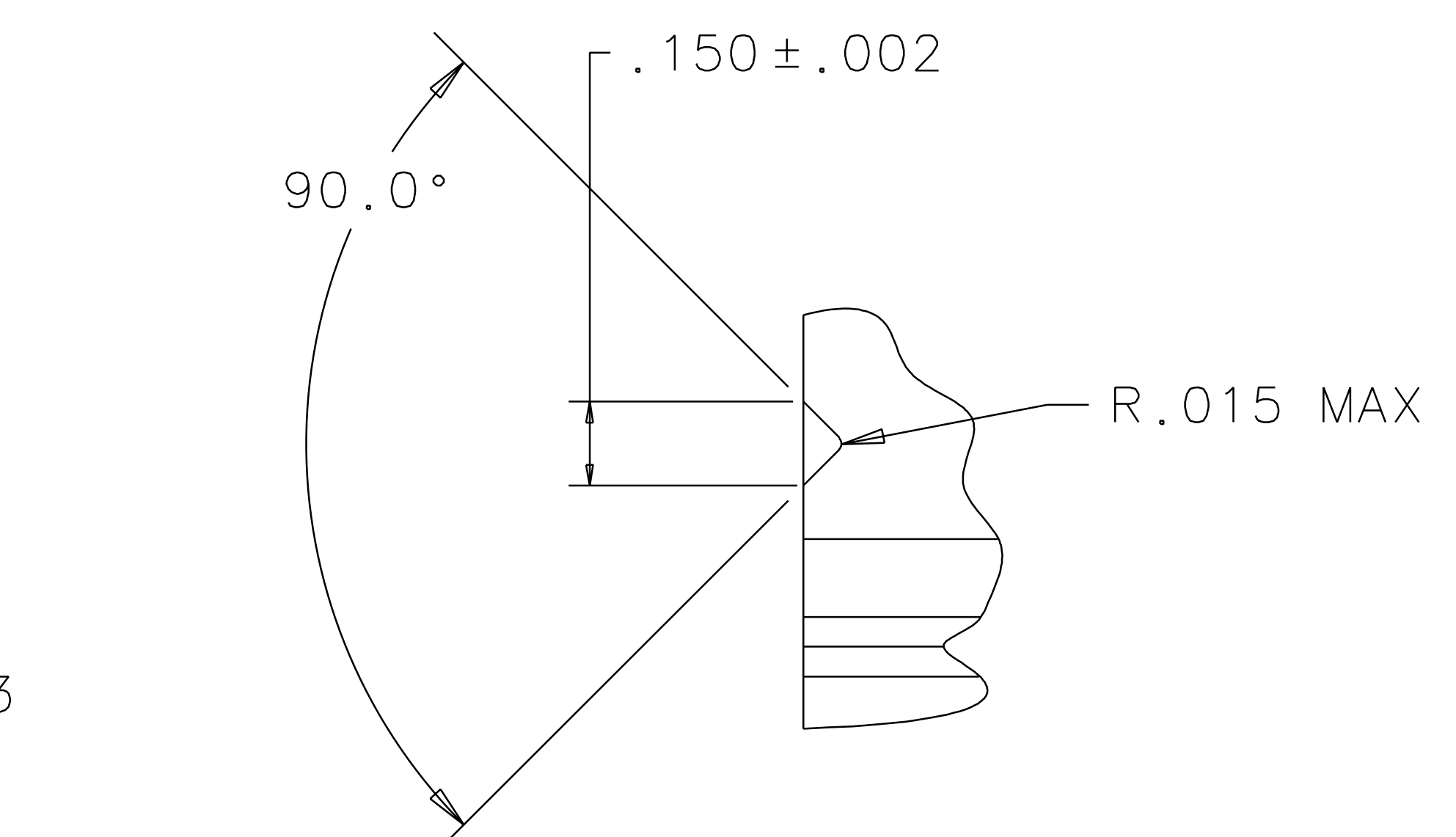
SECTION B-B



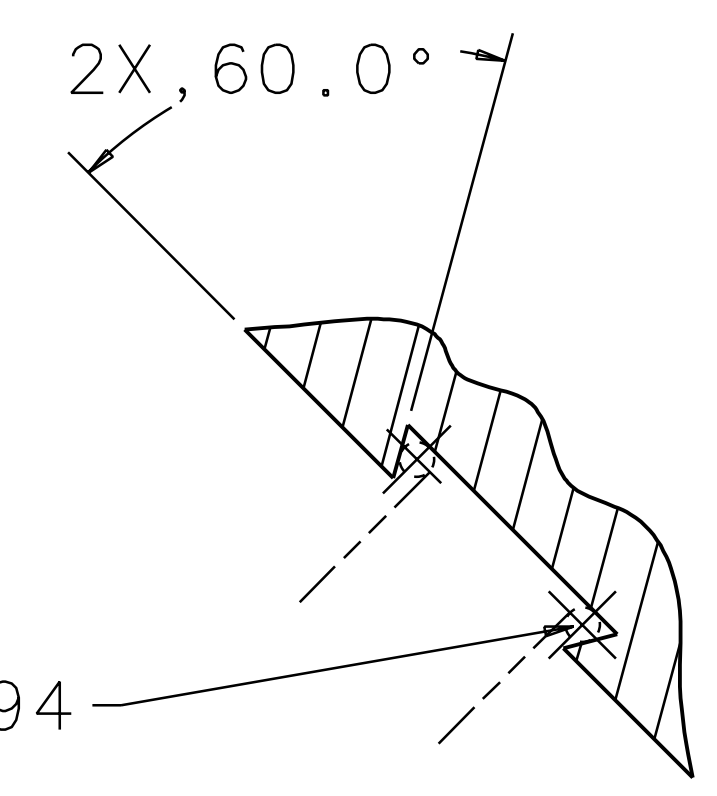
LEFT BLOCK, TOP  
MATERIAL: TEFLON



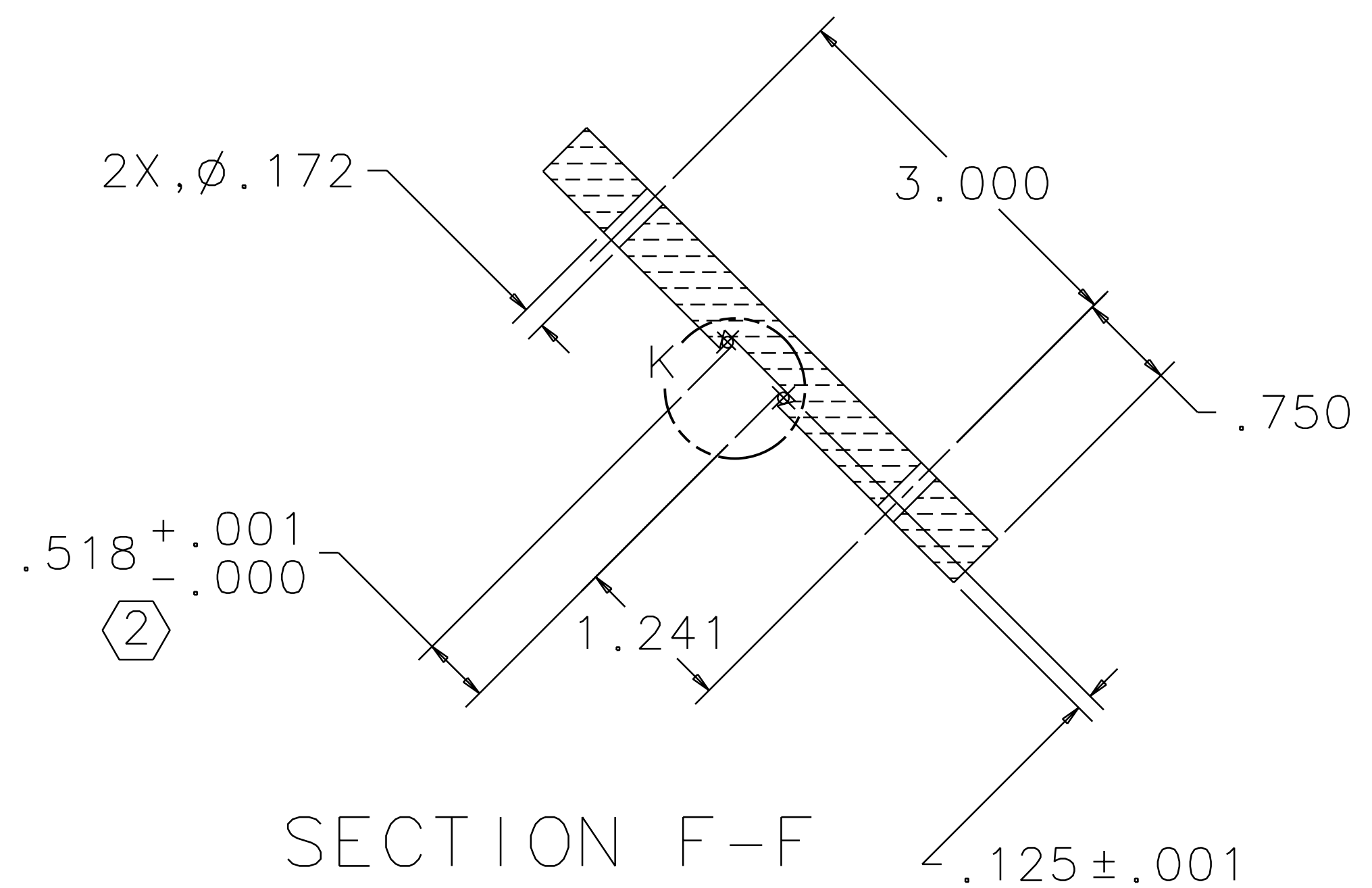
VIEW H  
SCALE 4:1



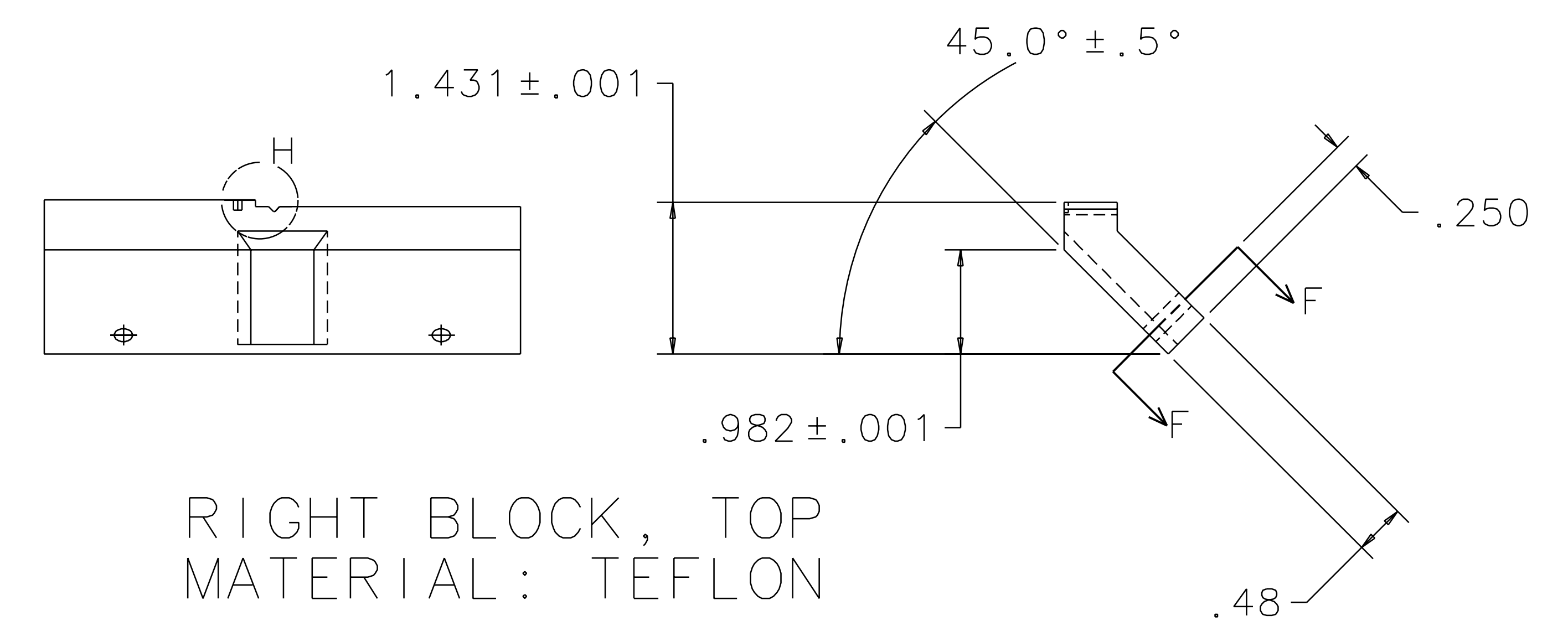
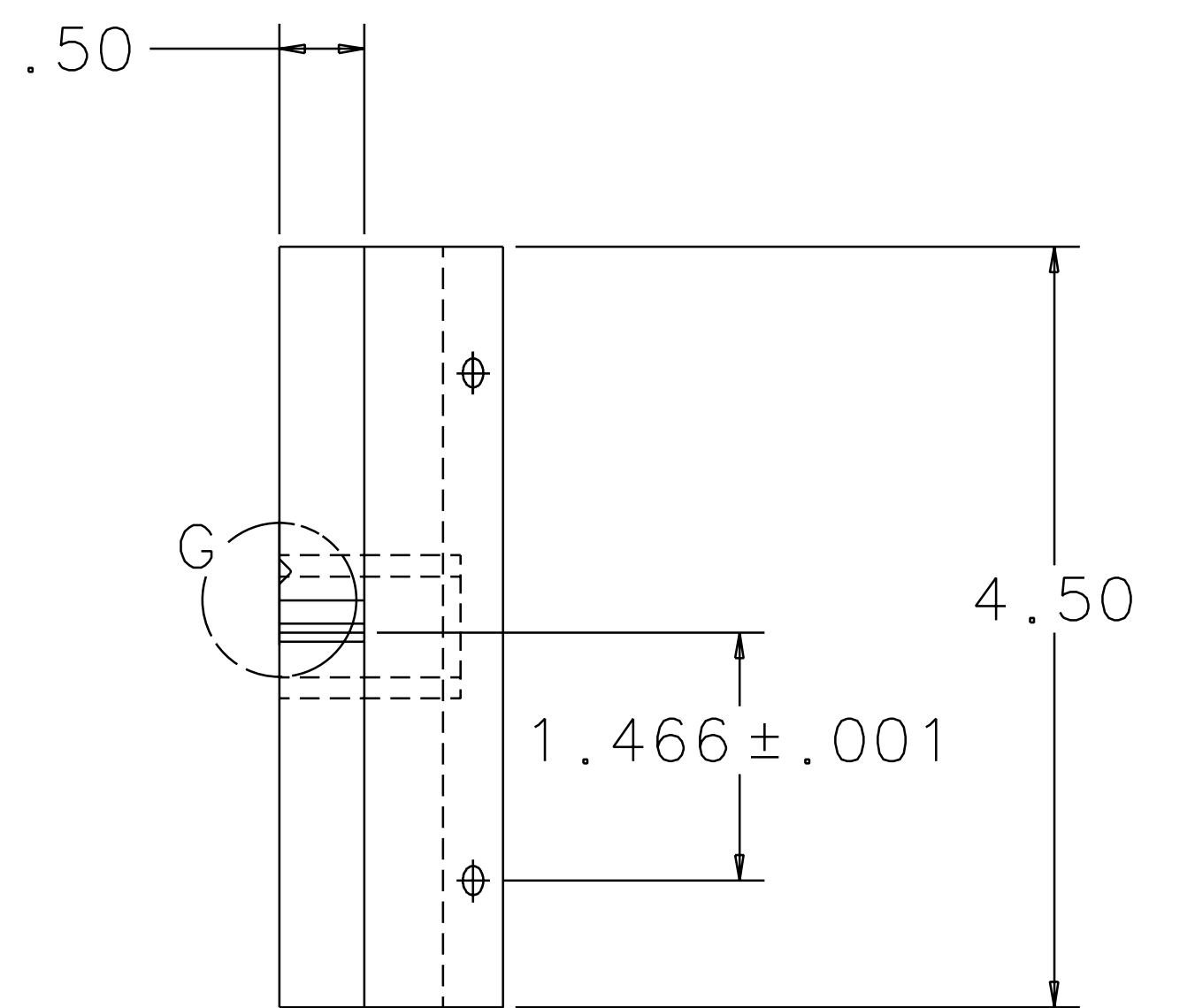
VIEW G  
SCALE 4:1



VIEW K  
SCALE 2:1



SECTION F-F



RIGHT BLOCK, TOP  
MATERIAL: TEFLON

| QTY REQ                                                                                       | PART OR IDENTIFYING NO | NOMENCLATURE OR DESCRIPTION                                                   | MATERIAL SPECIFICATION | ITEM NO.                                |
|-----------------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------|------------------------|-----------------------------------------|
|                                                                                               |                        | LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY |                        |                                         |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES |                        | APPROVALS                                                                     | DATE                   | TITLE                                   |
| 0.XX±0.01<br>0.XXX±0.005<br>ANGLES±0.5°                                                       |                        | DRAWN<br>J. Romie                                                             | 8/98                   | GUIDE ROD FIXTURE,<br>RECYCLING MIRRORS |
| DO NOT SCALE DRAWING                                                                          |                        | CHECKED                                                                       |                        | SIZE<br>E                               |
| NEXT ASSEMBLY                                                                                 |                        | MATERIAL                                                                      |                        | REV<br>A                                |
| FILE LOCATION                                                                                 |                        | FINISH                                                                        |                        | SCALE NONE                              |
|                                                                                               |                        |                                                                               |                        | SHEET 3 OF 3                            |