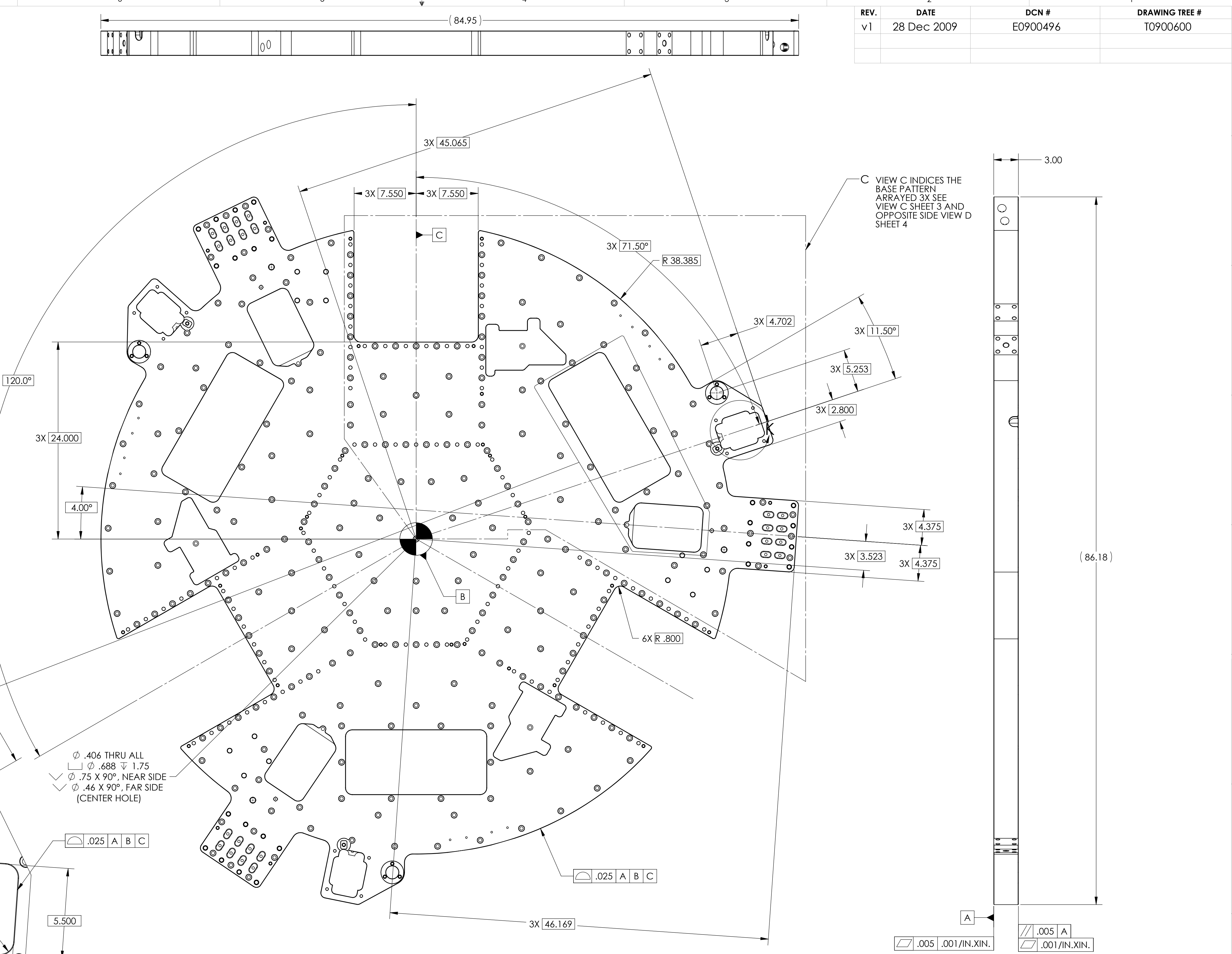
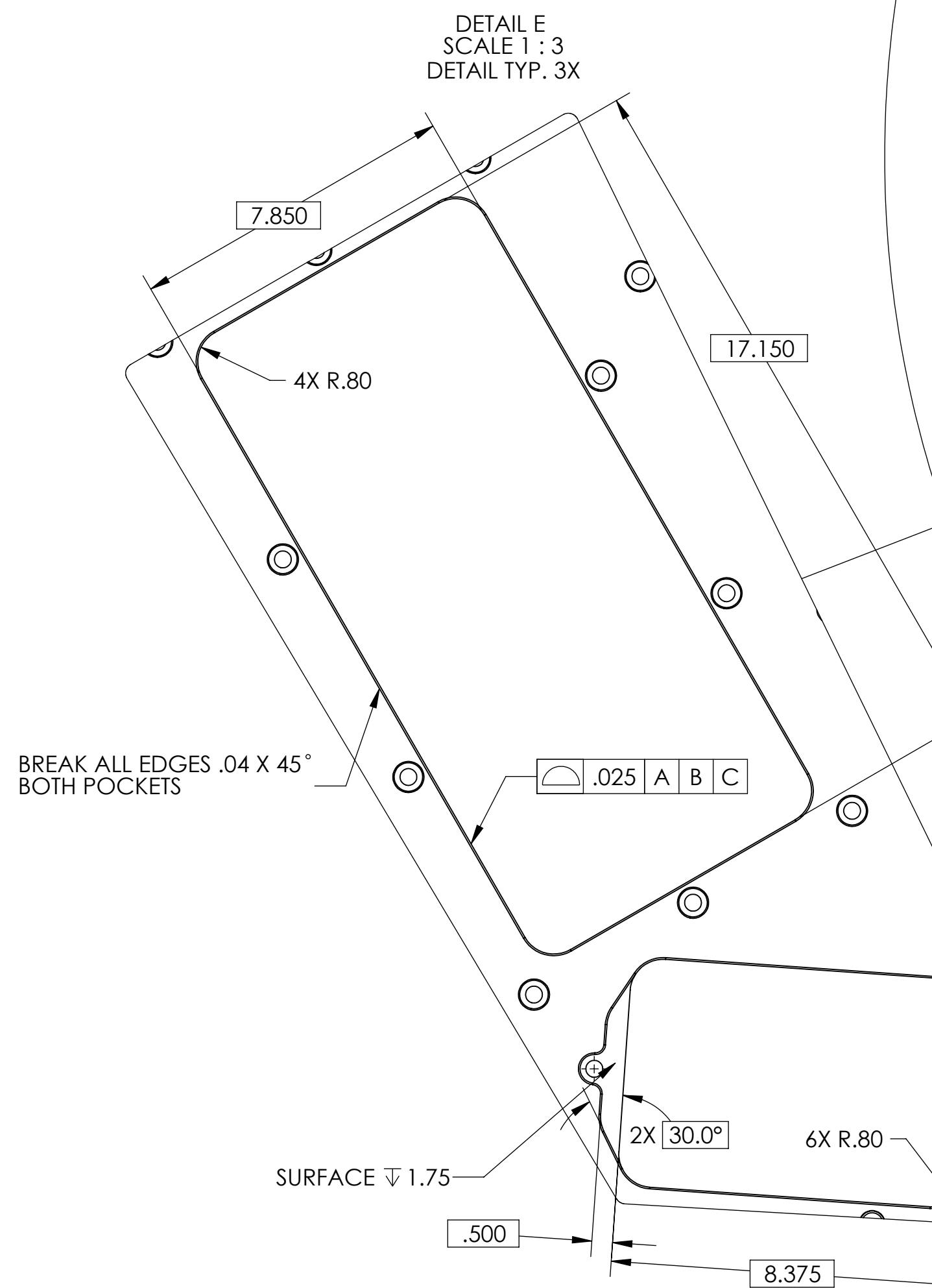
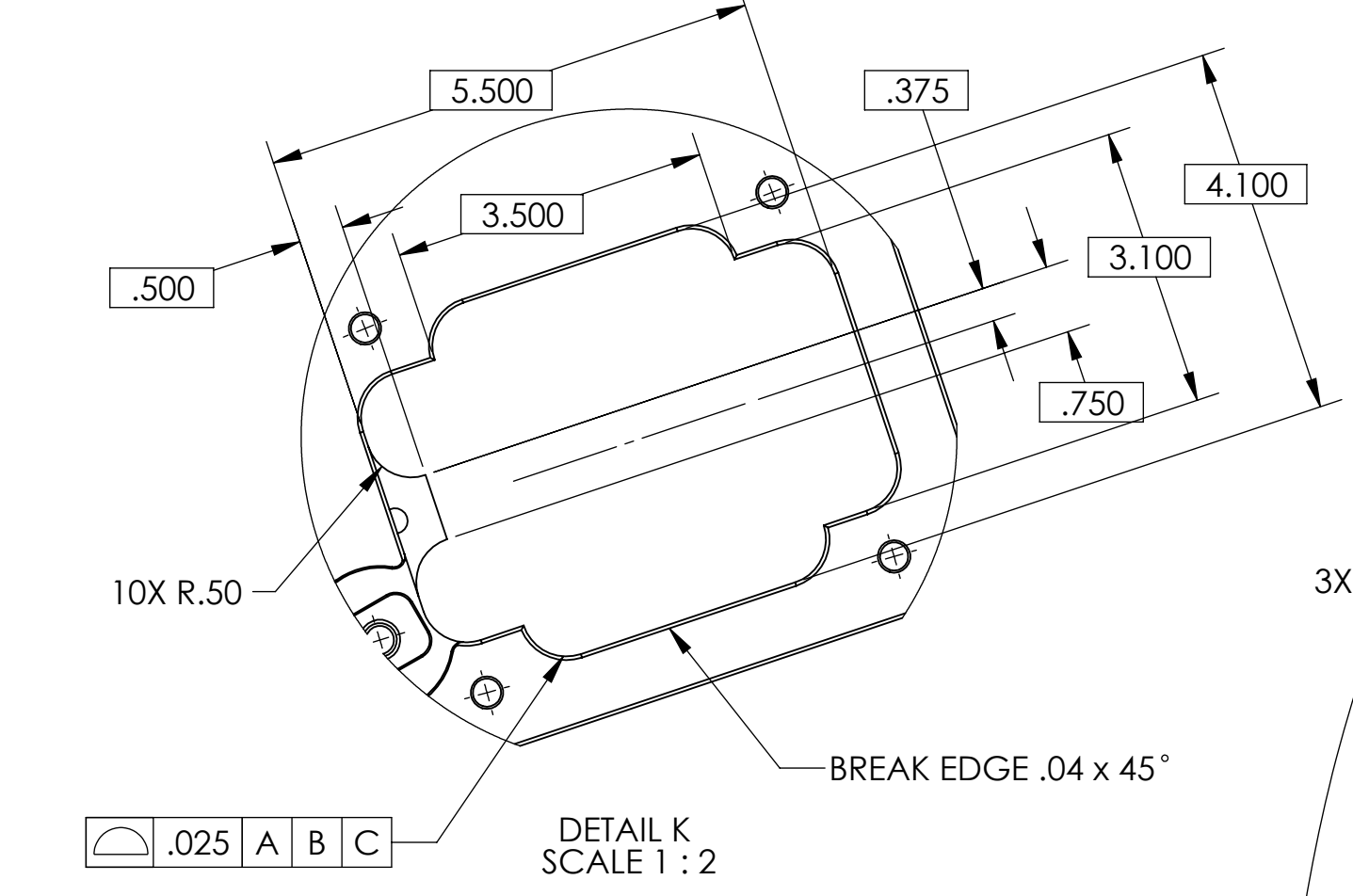


- NOTES CONTINUED:**
5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER AND REVISION ON NOTED SURFACE FOLLOWED ON THE NEXT LINE BY A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE .07" HIGH CHARACTERS.
EXAMPLE: DXXXXXX-VY, S/N 001.
A VIBRATORY TOOL MAY BE USED.
 6. THIS PART IS TO BE PRODUCED USING THE CAD MODEL. IF THERE ARE DISCREPANCIES BETWEEN THIS DRAWING AND THE CAD MODEL, THE MODEL WILL TAKE PRECEDENCE.
 7. SURFACES WITH PROFILE CONTROL ARE LOCATED BASIC WITH RESPECT TO REFERENCED DATUMS. A SURFACE PROFILE TOLERANCE OF .025 SHALL APPLY TO THE ENTIRE PART UNLESS SPECIFICALLY TOLERANCED ELSEWHERE ON THE DRAWING.
 8. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E048225.
 9. APPROXIMATE WEIGHT = 684 LBS.
 10. A TRUE POSITION TOLERANCE OF ϕ .010 IS - THE SAME AS A CONVENTIONAL TOLERANCE OF \pm .005.
 11. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. ABRASIVE REMOVAL TECHNIQUES NOT ACCEPTABLE.
 12. ALL THREADED INSERTS TO BE INSTALLED BY LIGO PERSONNEL AFTER DELIVERY OF FINISHED PARTS.

REV.	DATE	DCN #	DRAWING TREE #
v1	28 Dec 2009	E0900496	T0900600



- ϕ .406 THRU ALL
- \square ϕ .688 ∇ 1.75
- \surd ϕ .75 X 90°, NEAR SIDE
- \surd ϕ .46 X 90°, FAR SIDE (CENTER HOLE)

DIMENSIONS ARE IN INCHES
 TOLERANCES:
 .XX \pm .015
 .XXX \pm .005
 ANGULAR \pm .5°

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)
 1. INTERPRET DRAWING PER ASME Y14.5-1994.
 2. BREAK ALL EDGES AND CORNERS .03 X 45°.
 3. DO NOT SCALE FROM DRAWING.
 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

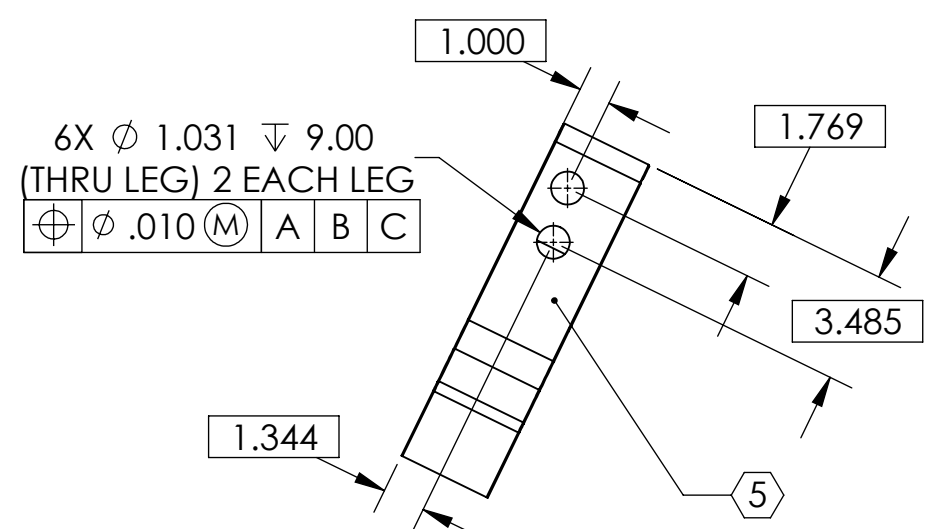
MATERIAL: 6061-T6 Al
 FINISH: 63 μ inch
 NEXT ASSY: D0901181

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SYSTEM: ADVANCED LIGO
 SUB-SYSTEM: SEI

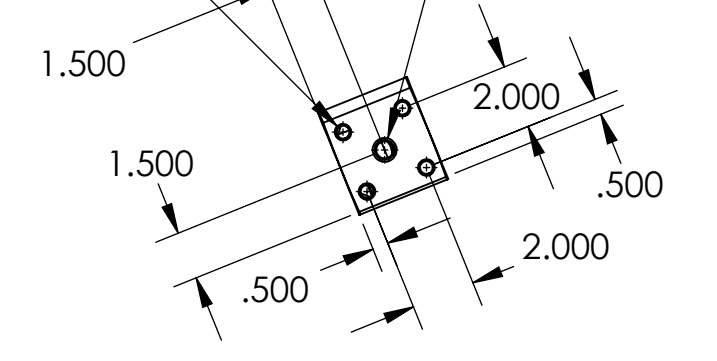
PART NAME		DESIGNER		DATE		SIZE		DWG. NO.		REV.	
Optical Table, Up-Facing, aLIGO BSC ISI		A.STEIN		29 Dec. 2009		D		D0901517		v1	
DRAFTER		M.HILLARD		28 Dec 2009							
CHECKER		F.MATCHARD		28 Dec 2009							
APPROVAL		K.MASON		28 Dec 2009		SCALE: 1:6		PROJECTION:		SHEET 1 OF 4	

D0901517_Optical_Table_Up-Facing_BSC_ISI_PART_PDM_REV_X-066_DRAWING_PDM_REV_X-014



SECTION G-G

3X ϕ .531 ∇ 1.80
5/8-11 UNC ∇ 1.50
 ∇ ϕ .75 X 120°, NEAR SIDE

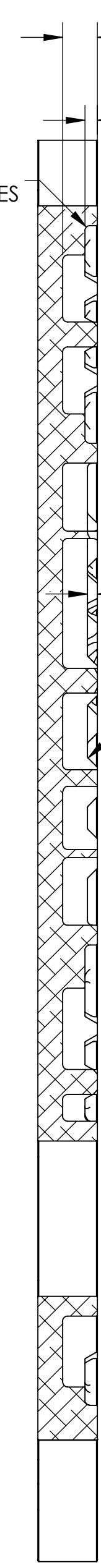


SECTION J-J

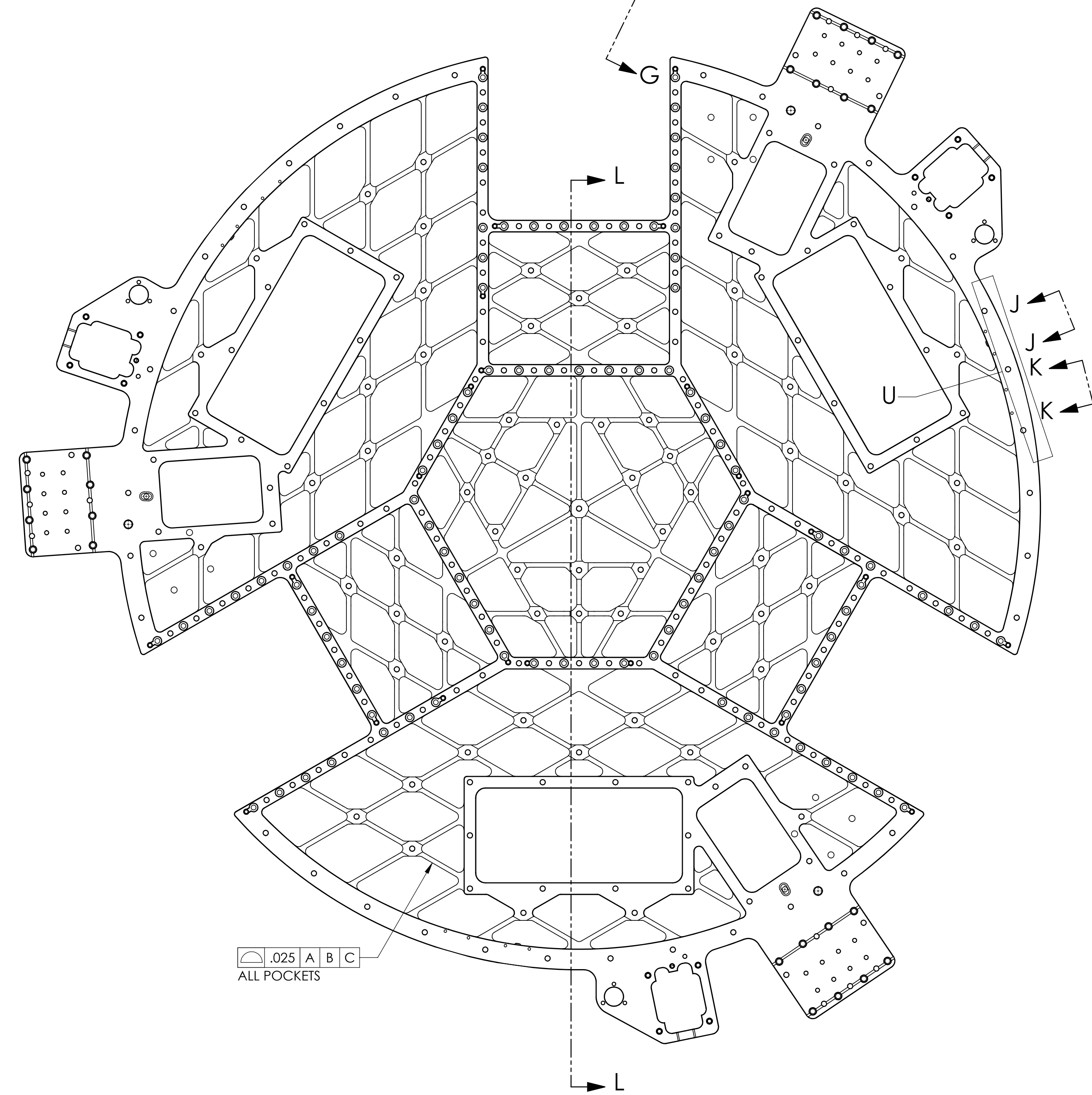
∇ 1.75 POCKETS TYP.

R.25 TYP FOR WALL EDGES
.63 TYP.

.50
R.125 TYP. FOR HOLE BOSSES



SECTION L-L

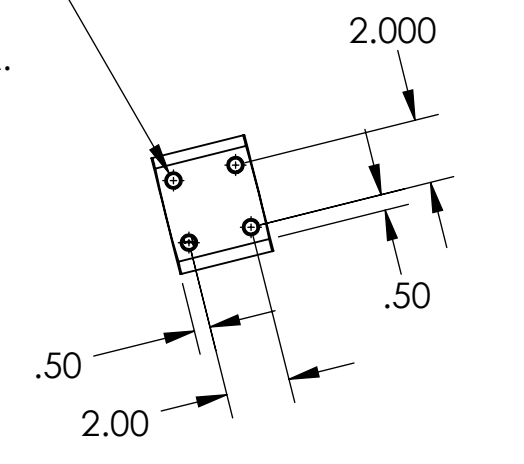


.025 A B C
ALL POCKETS

.029 FLAT FOR HOLES

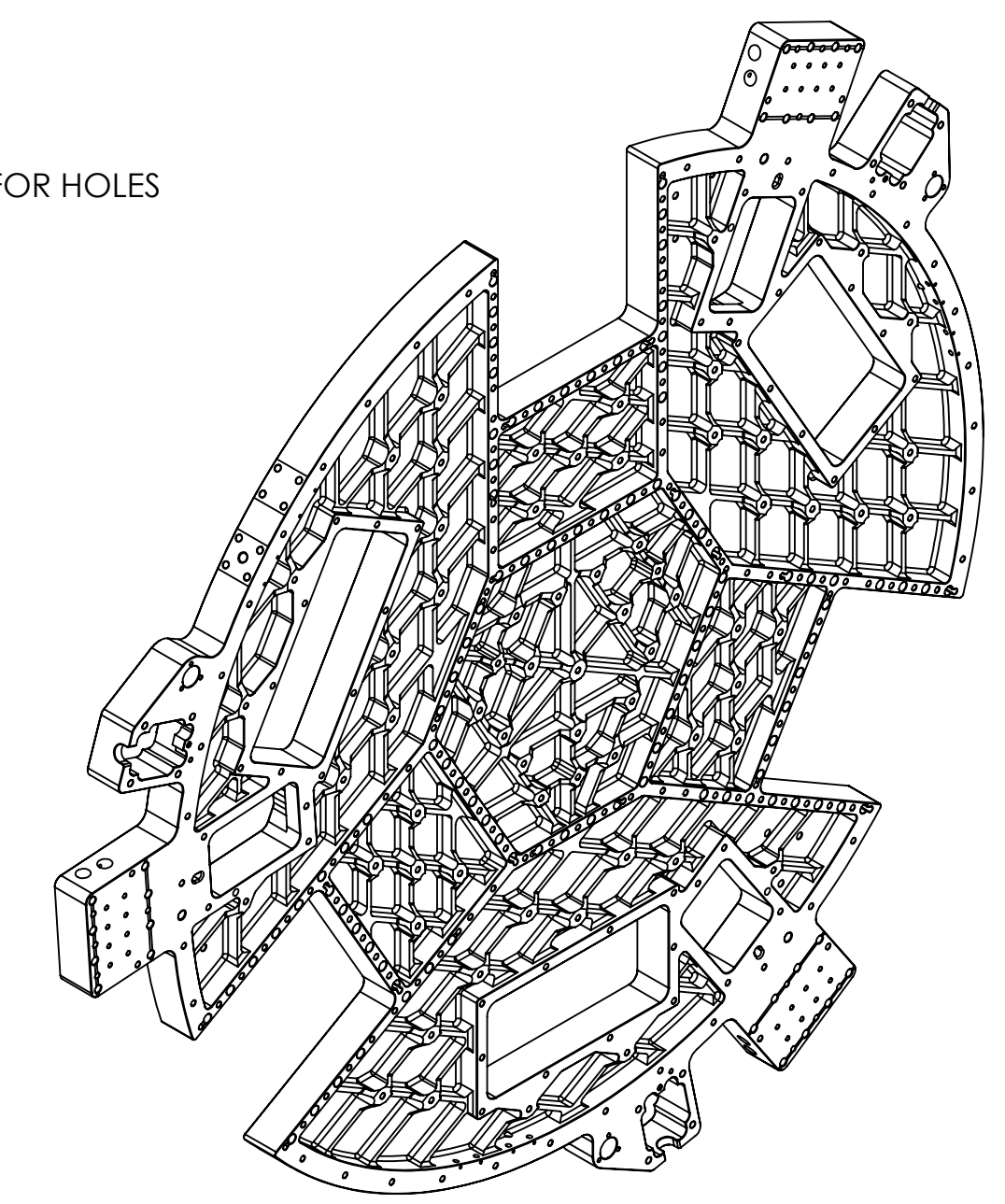
DETAIL U
SCALE 1:1

12X ϕ .397 ∇ 1.75
 ∇ ϕ .52 X 120°, NEAR SIDE
TAP FOR 3/8-16
HELICOIL INSERT = 2.0 * DIA.



SECTION K-K

.029 FLAT FOR HOLES

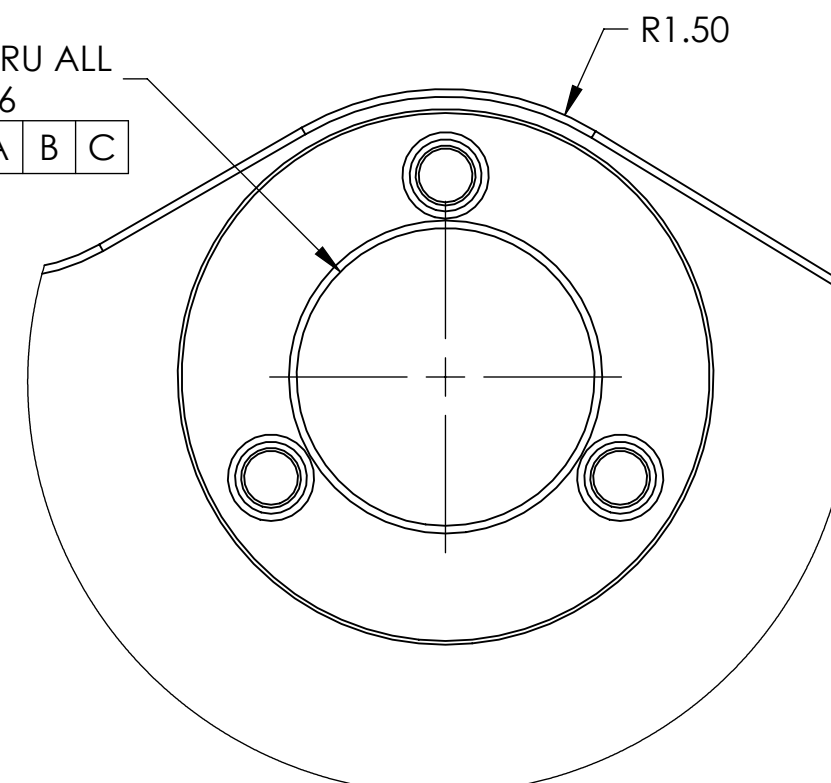


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SIZE	DWG. NO.	REV.
D	D0901517	v1
SCALE: 1:6	PROJECTION:	SHEET 2 OF 4

DDP01517_Optical_Table-Top-Forging-BSC_IBI_PART_PDM_REV_X-066_DRAWING_PDM_REV_X-014

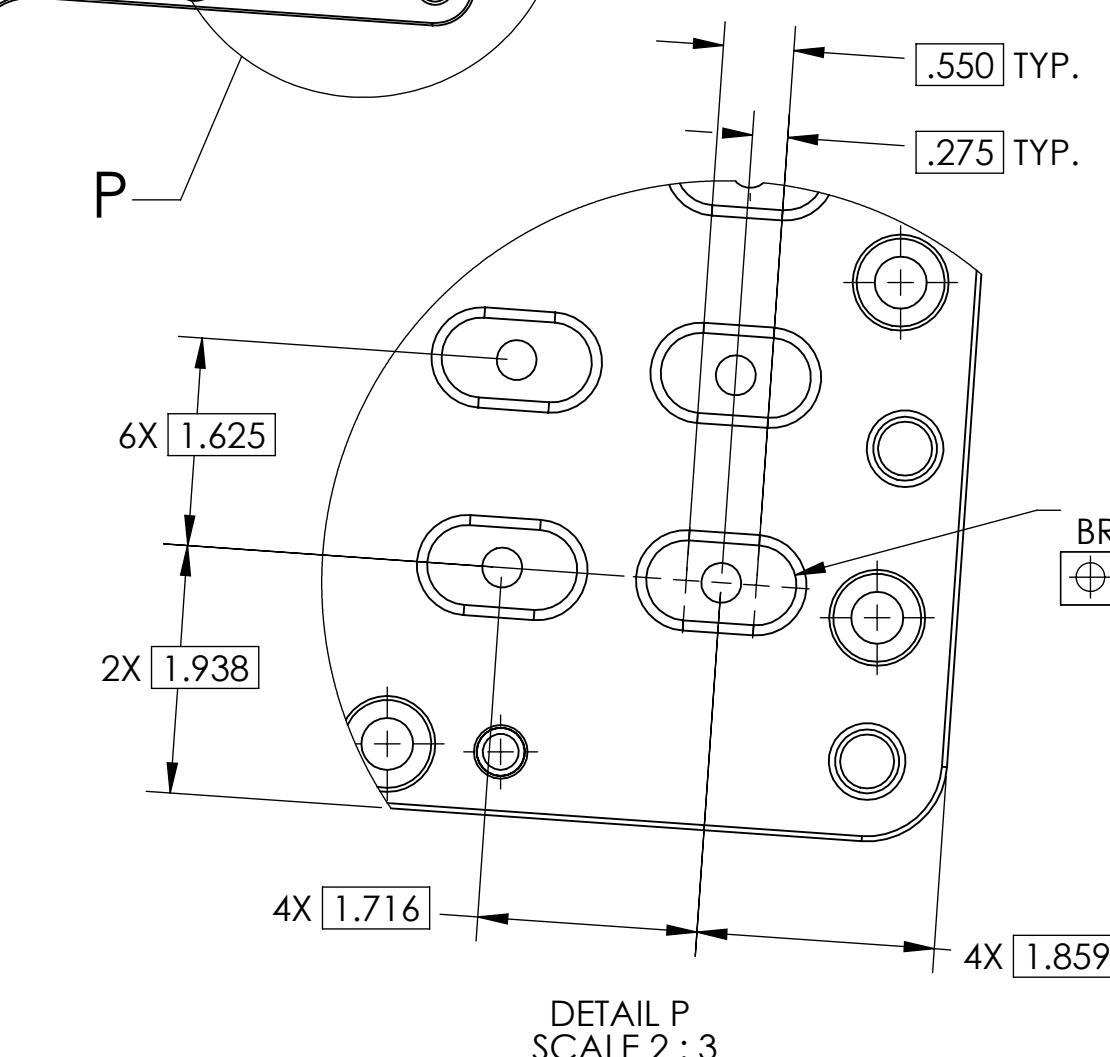
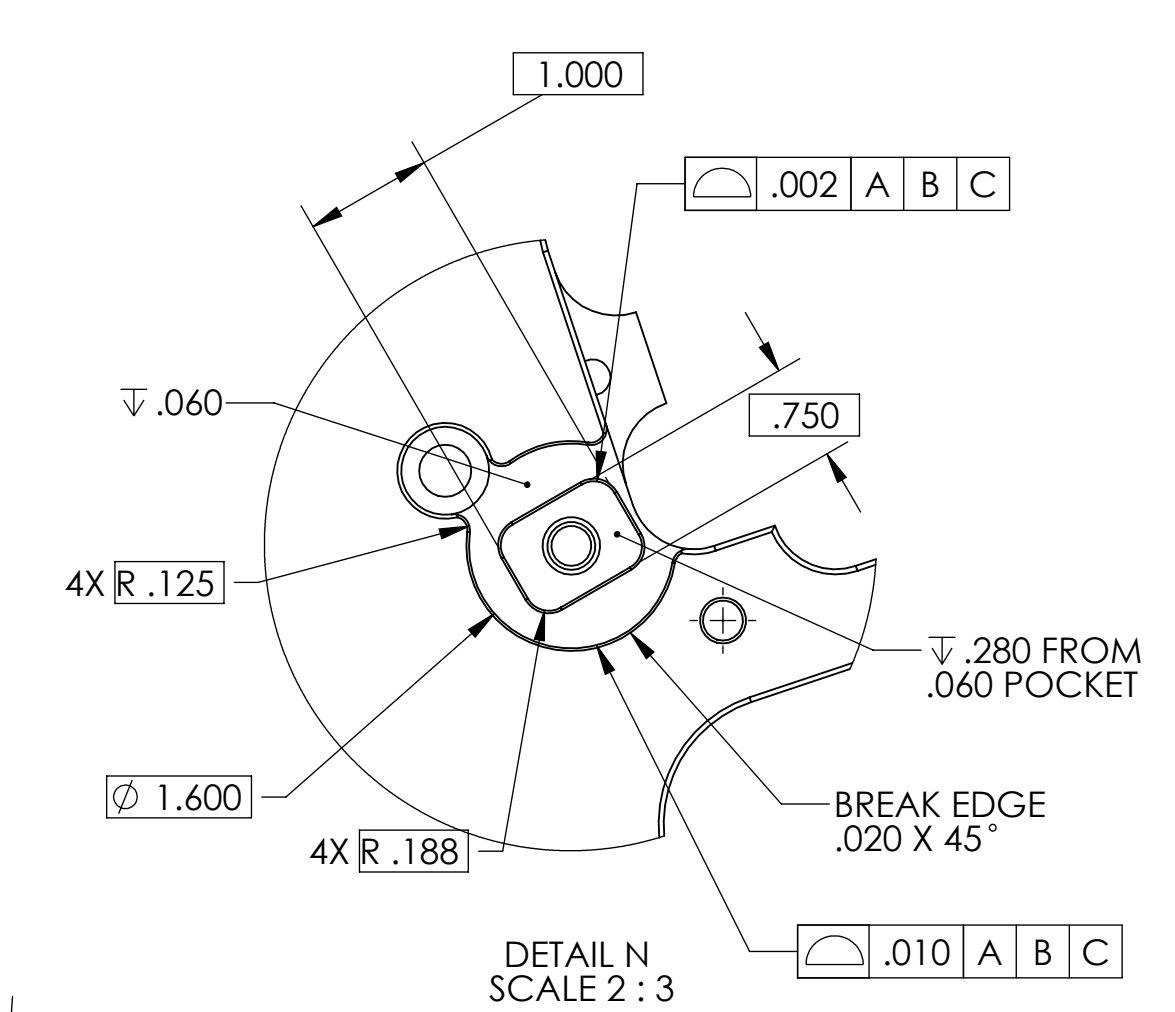
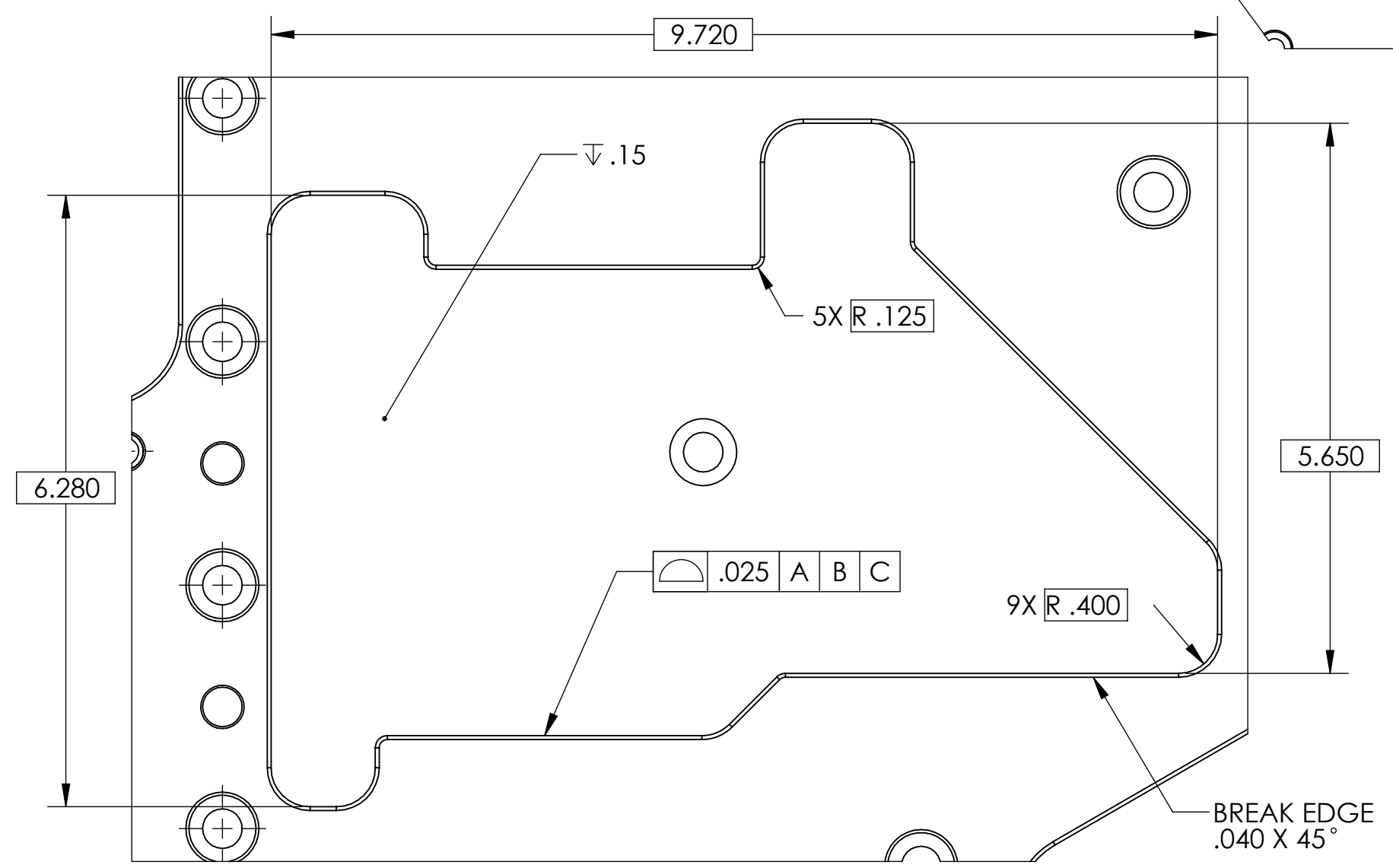
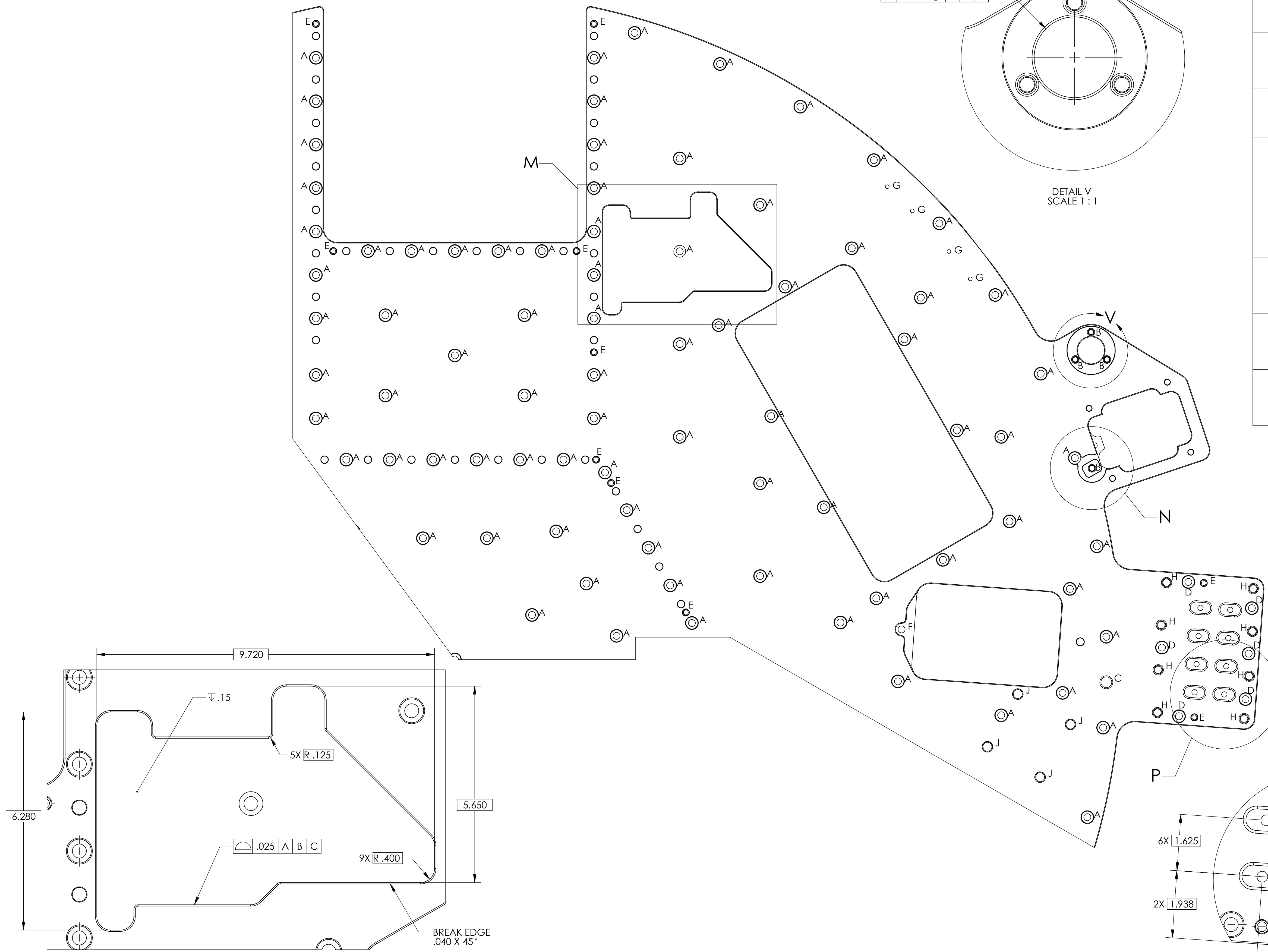
VIEW C
VIEW SHOWN INDICES THE BASE
PATTERN ARRAYED 3X

3X ϕ 1.551 \pm .001 THRU ALL
2.750 ∇ .06
 \oplus ϕ .002 (M) A B C



TAG	SIZE	QUANTITY	GD&T
A	ϕ .406 THRU ALL ∇ ϕ .688 ∇ 1.75 ∇ ϕ .75 X 90°, NEAR SIDE ∇ ϕ .46 X 90°, FAR SIDE	81	\oplus ϕ .010 (M) A B C
B	ϕ .313 ∇ 1.50 3/8-16 UNC ∇ 1.13 ∇ ϕ .45 X 120°, NEAR SIDE ∇ ϕ .28 THRU	4	\oplus ϕ .010 A B C
C	ϕ .531 THRU ALL 5/8-11 UNC THRU ALL ∇ ϕ .75 X 120°, NEAR SIDE ∇ ϕ .75 X 120°, FAR SIDE	1	\oplus ϕ .010 A B C
D	ϕ .406 THRU ALL ∇ ϕ .688 ∇ 1.00 ∇ ϕ .75 X 90°, NEAR SIDE ∇ ϕ .46 X 90°, FAR SIDE	6	\oplus ϕ .010 (M) A B C
E	ϕ .3750 $^{+.0000}$ $_{-.0004}$ ∇ .60 ∇ ϕ .377 $^{+.001}$ $_{-.000}$ ∇ .13 ∇ ϕ .42 X 90°, NEAR SIDE	10	\oplus ϕ .002 (M) A B C
F	ϕ .406 THRU ALL ∇ ϕ .688 ∇ 1.75 ∇ ϕ .46 X 90°, FAR SIDE	1	\oplus ϕ .010 (M) A B C
G	ϕ .22 THRU ALL	4	\oplus ϕ .030 (M) A B C
H	ϕ .422 ∇ 2.00 1/2-13 UNC ∇ 1.50 ∇ ϕ .60 X 120°, NEAR SIDE	8	\oplus ϕ .010 A B C A THREAD PITCH DIAMETER LIMIT OF H11 APPLIES
J	ϕ .516 THRU ALL ∇ ϕ .62 X 120°, NEAR SIDE TAP FOR 1/2-13 HELICOIL INSERT = 2.0 * DIA.	4	\oplus ϕ .010 A B C

HOLE PATTERN ARRAYED 3X



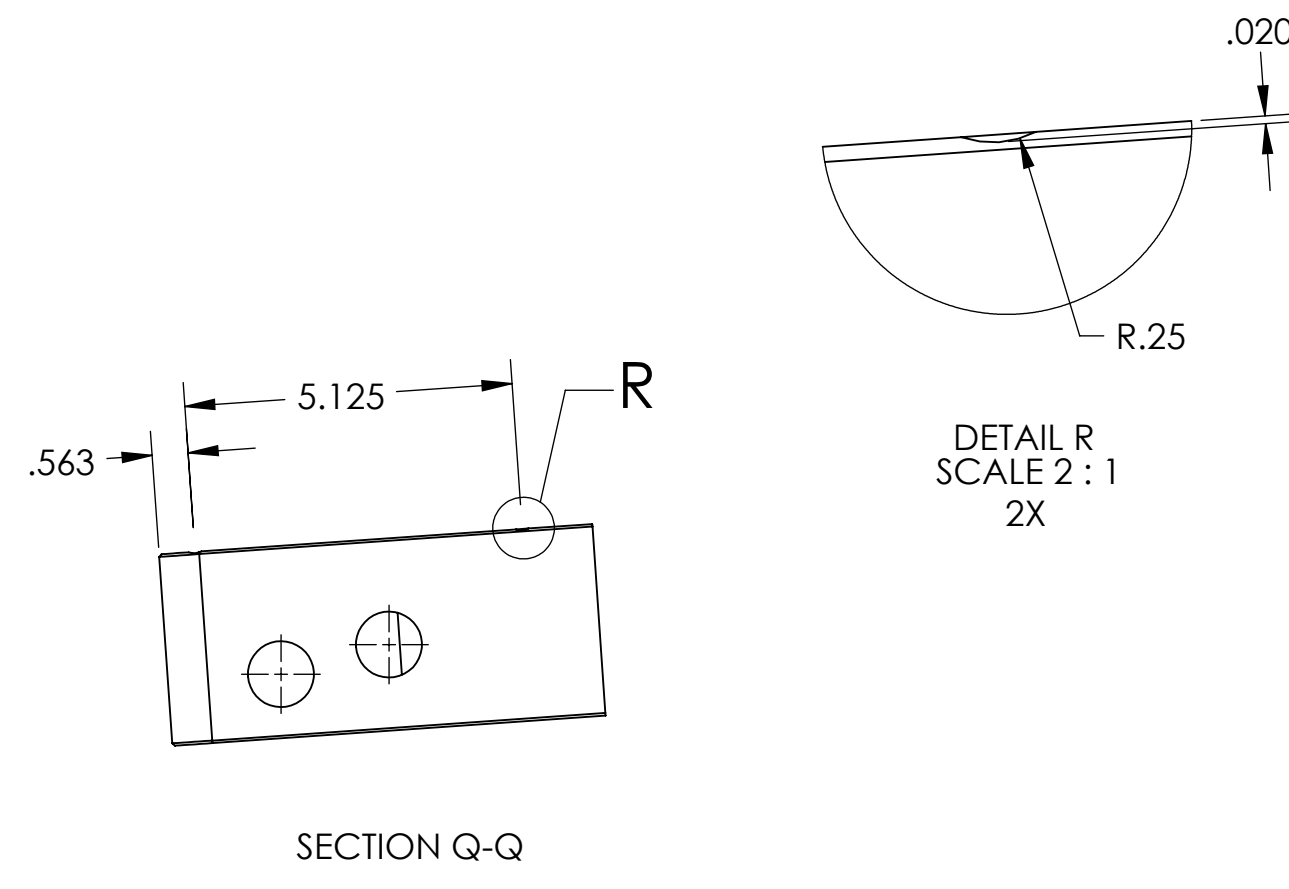
ϕ .625 ∇ 2.50
BREAK EDGE .08 X 45°
 \oplus ϕ .010 (M) A B C

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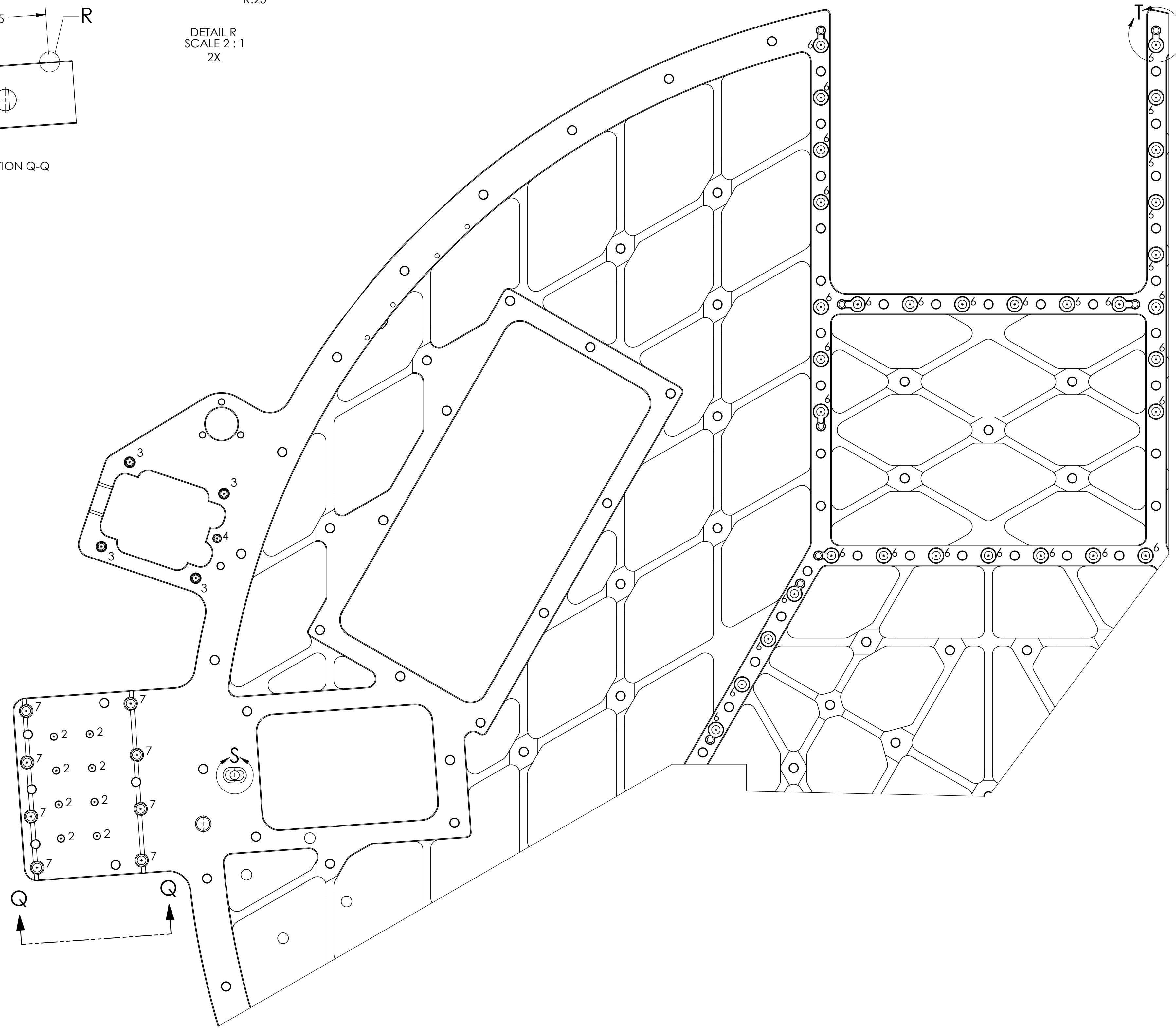
SIZE DWG. NO. **D0901517** REV. **v1**

SCALE: 1:3 PROJECTION: SHEET 3 OF 4

D0901517_01.dwg, Table-Up-Forging-BSC_LB1_PART_PDM_REV_X-066, DRAWING_PDM_REV_X-014

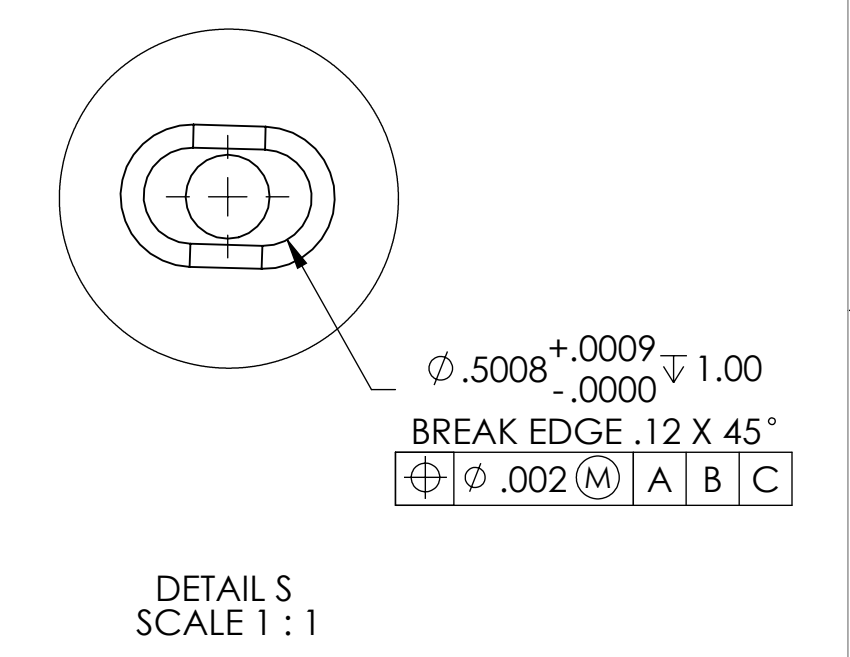
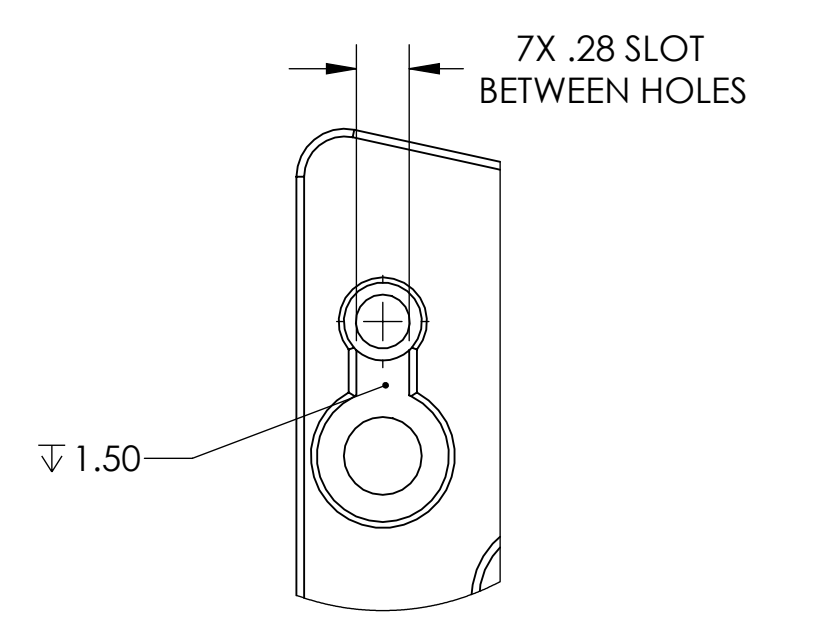


VIEW D
VIEW SHOWN INDICES THE BASE
PATTERN ARRAYED 3X



TAG	SIZE	QUANTITY	GD&T
2	$\checkmark \phi .313 \downarrow .50$ $\phi .36 \times 90^\circ$, NEAR SIDE	8	$\oplus \phi .030 \text{ (M)}$ A B C
3	$\checkmark \phi .397 \downarrow 1.30$ $\phi .52 \times 120^\circ$, NEAR SIDE TAP FOR 3/8-16 HELICOIL INSERT = 2.0 * DIA.	4	$\oplus \phi .010$ A B C
4	$\phi .3750^{+.0000} \downarrow .60$ $\square \phi .377^{+.001} \downarrow .13$ $\checkmark \phi .42 \times 90^\circ$, NEAR SIDE	1	$\oplus \phi .002 \text{ (M)}$ A B C
6	$\phi .406$ THRU ALL $\checkmark \phi .688 \downarrow 1.50$ $\checkmark \phi .75 \times 90^\circ$, NEAR SIDE $\phi .46 \times 90^\circ$, FAR SIDE	32	$\oplus \phi .010 \text{ (M)}$ A B C
7	$\checkmark \phi .563 \downarrow 1.00$ $\phi .65 \times 90^\circ$, NEAR SIDE	8	$\oplus \phi .010 \text{ (M)}$ A B C

HOLE PATTERN ARRAYED 3X



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SIZE DWG. NO. **D0901517** REV. **v1**

SCALE: 1:3 PROJECTION: SHEET 4 OF 4

D0901517_Optical_Table-Top-Focusing-BSC_IBI_PART_PDM_REV_X-066_DRAWING_PDM_REV_X-014