

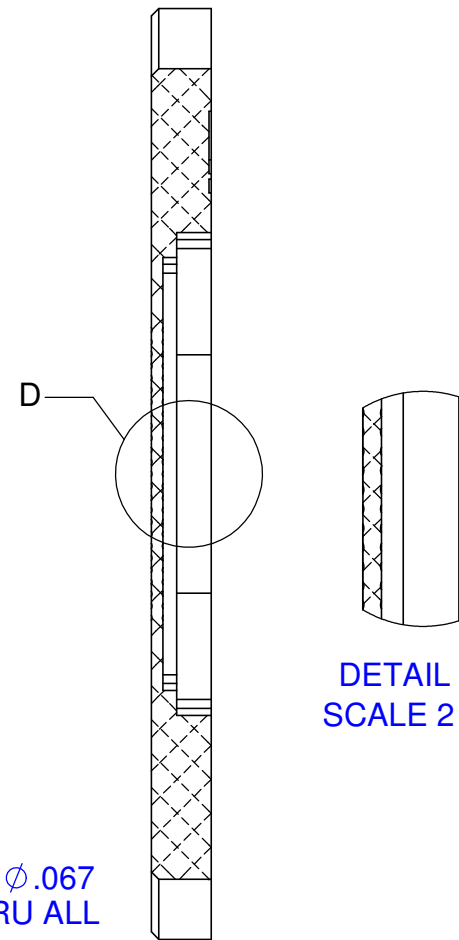
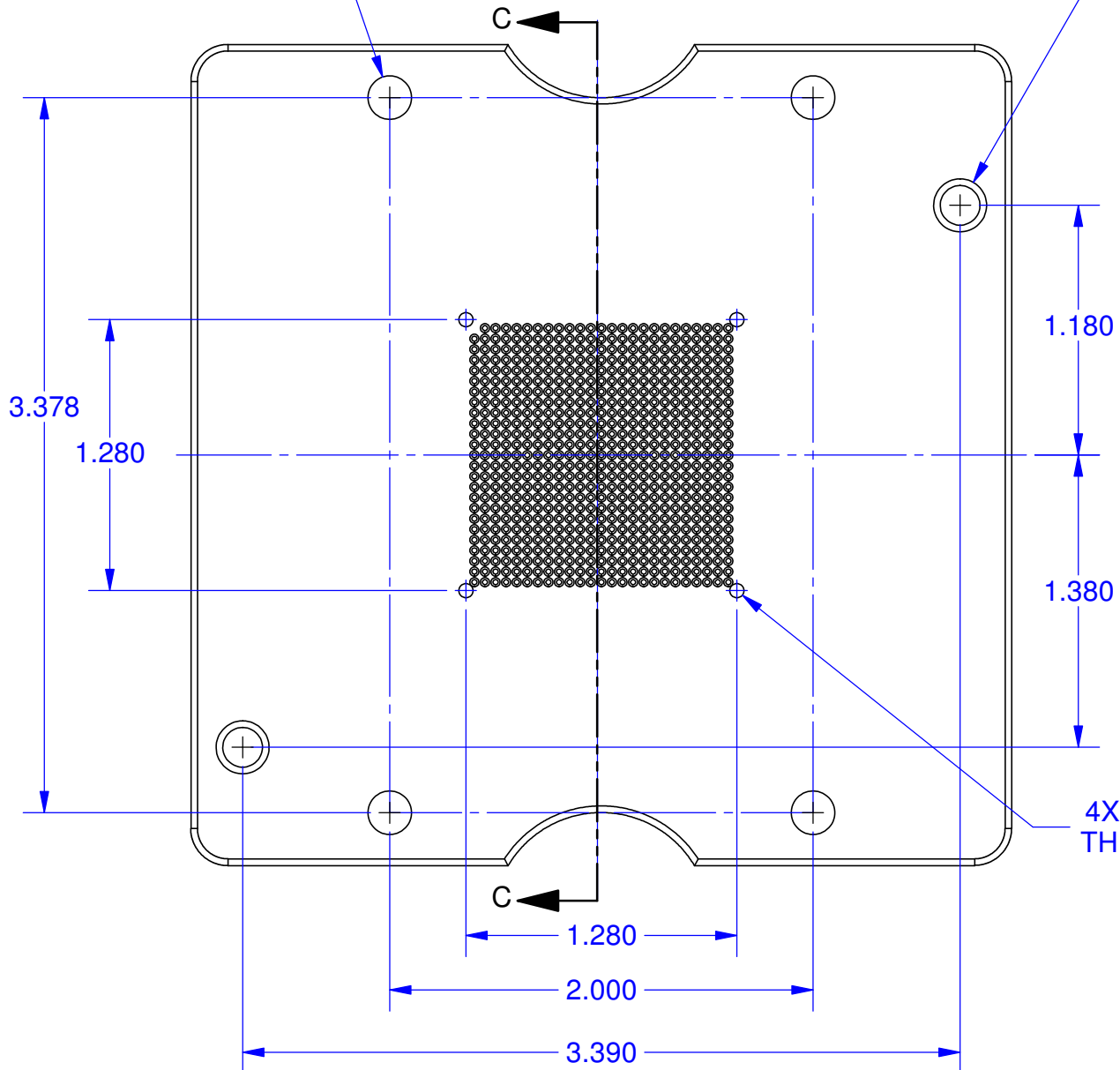
NOTES: (UNLESS OTHERWISE SPECIFIED).
 1) DIMENSIONS: INCH [MM].

APPROVALS		DATE		TopLine [®]			
DRAWN R. Le		9/4/2018					
ENG M. Hart		9/4/2018		TITLE C7-GRAPHITE-624-M GRAPHITE TOOL			
MFG				SCALE 1:1	SIZE A	DRAWING NO. 722570	REV A
QA				DO NOT SCALE DRAWING			
CUST				SHEET 1 OF 15			
REVISED							

BOTTOM VIEW
TOP GRAPHITE

4X ϕ .206 THRU ALL

ϕ .188 THRU ALL
 ϕ .2503^{+.0002}_{-.0000} ∇ .193



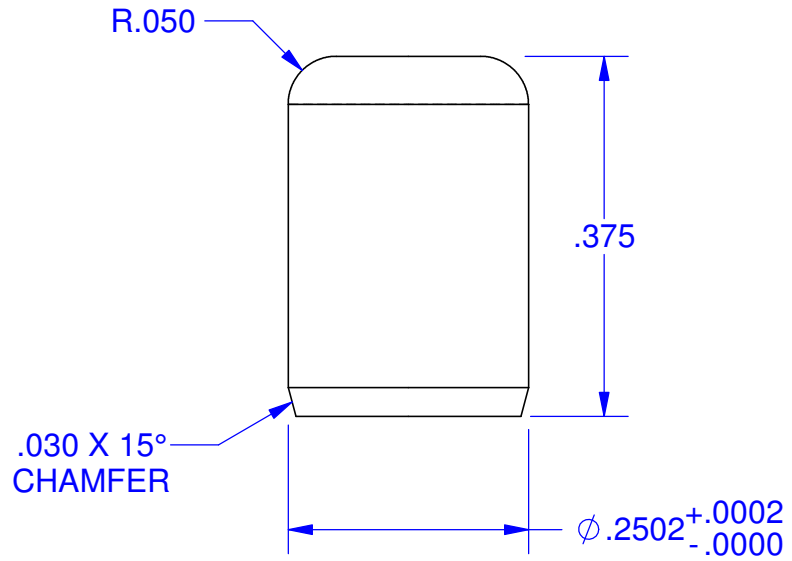
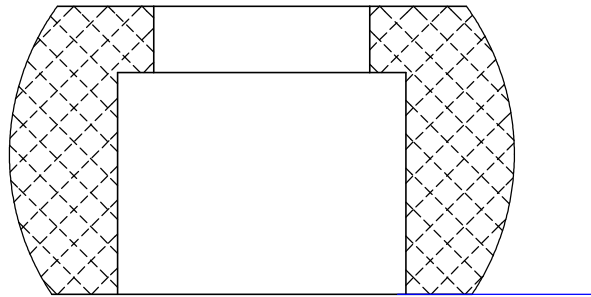
DETAIL D
SCALE 2 : 1

4X ϕ .067
THRU ALL

SECTION C-C

TopLine [®]			
TITLE C7-GRAPHITE-624-M GRAPHITE TOOL			
SCALE 1.25:1	SIZE A	DRAWING NO. 722570	REV A
DO NOT SCALE DRAWING			SHEET 2 OF 15

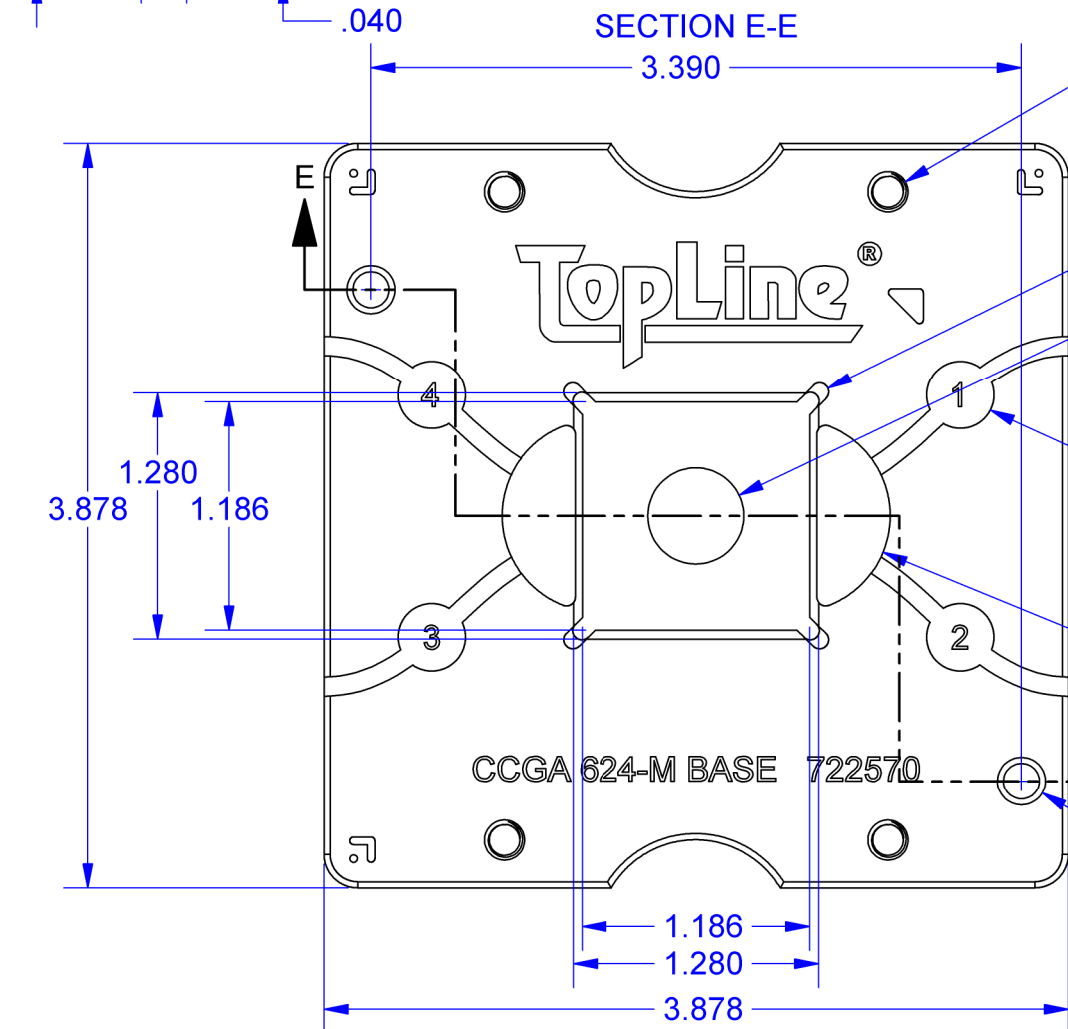
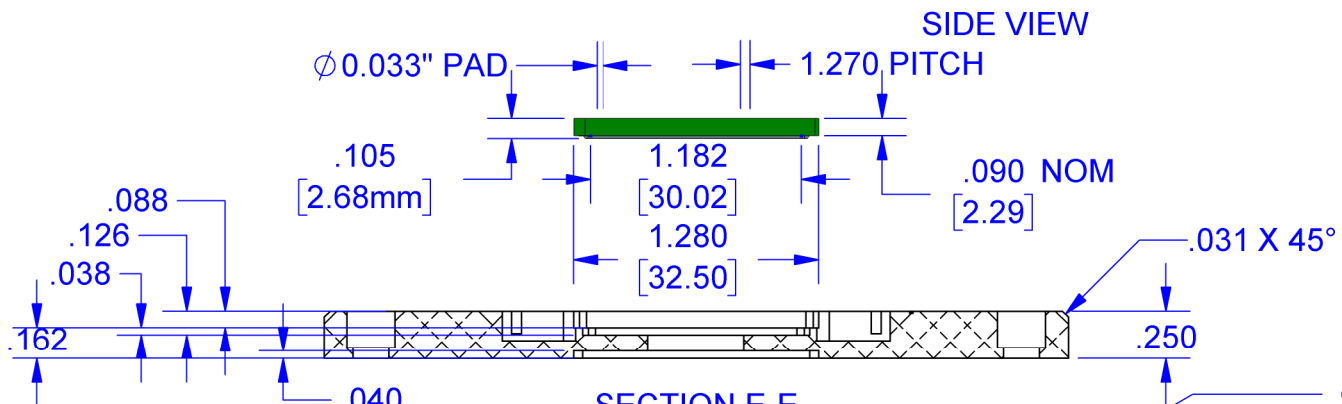
ALIGNMENT PIN
DWG 70256X



DETAIL P
SEE SHEET 1

NOTES: (UNLESS OTHERWISE SPECIFIED).
1) DIMENSIONS: INCH [MM].

TopLine ®			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
6:1	A	722570	A
DO NOT SCALE DRAWING			SHEET 3 OF 15

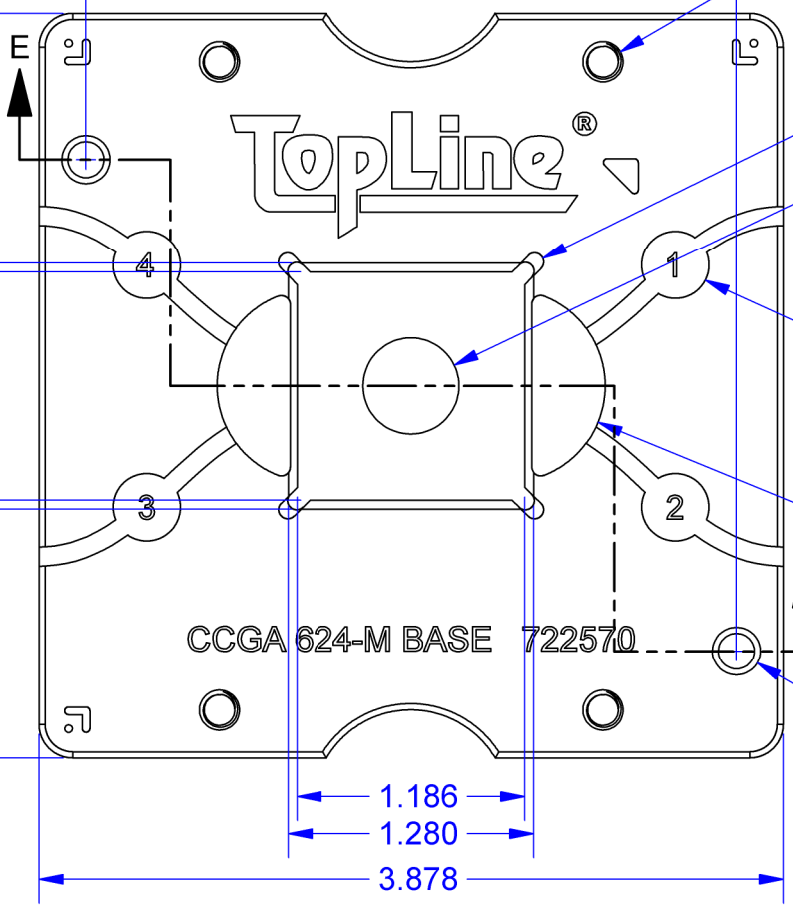


$\phi .159$ THRU ALL
 10-32 UNF THRU ALL
 ✓ $\phi .209$ X 90°, NEAR SIDE
 ✓ $\phi .212$ X 90°, FAR SIDE

12X R.047
 $\phi .500$ THRU
 4X THERMAL COUPLE (OPTIONAL)

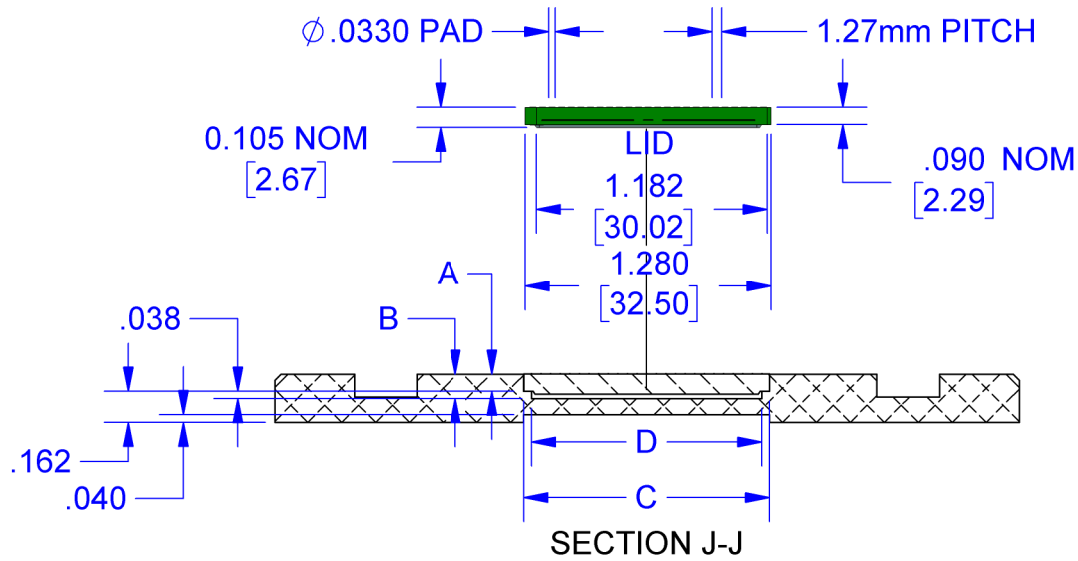
2X R.500
 $\phi .188$ THRU
 $\phi .2503^{+.0020}_{-.0000}$.193

**TOP VIEW
BASE GRAPHITE**

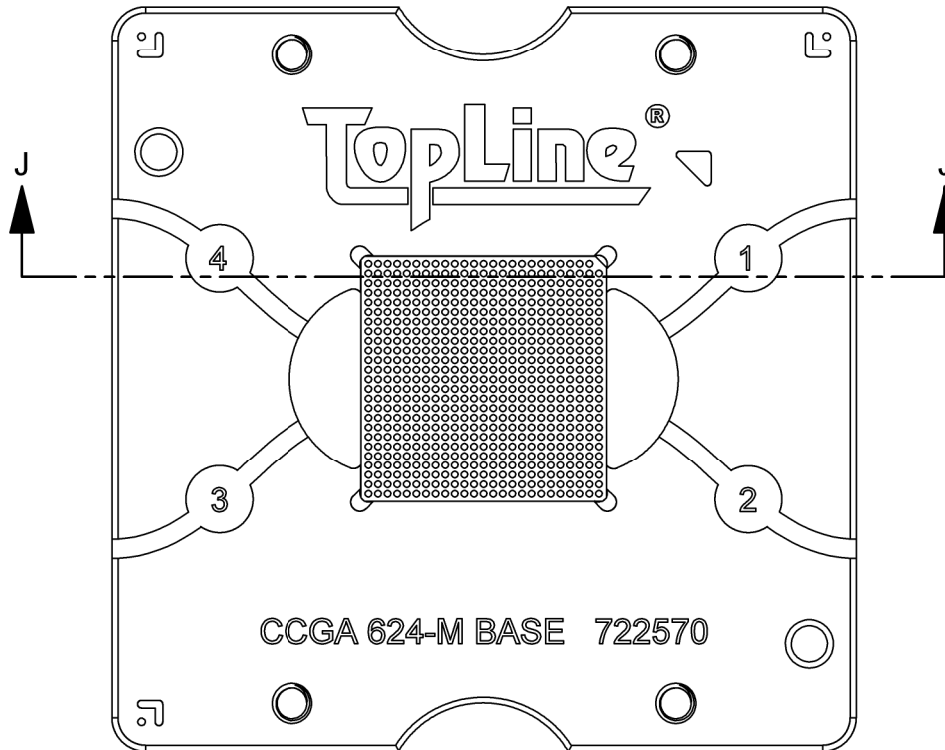


TopLine®			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
1:1	A	722570	A
DO NOT SCALE DRAWING			SHEET 4 OF 15

BASE ASSEMBLY



REF	DESCRIPTION	INCH
A	POCKET DEPTH PERIMETER	0.088
B	POCKET DEPTH FOR + LID	0.126
C	POCKET X/Y	1.284
D	LID DOWNSET X/Y	1.186



TopLine[®]			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
1:1	A	722570	A
DO NOT SCALE DRAWING			SHEET 5 OF 15

BOTTOM VIEW
BASE GRAPHITE

Ø .500 THRU ALL

4X R.047
VACUUM CHASE
(OPTIONAL)

3.378

1.280

Ø .159 THRU ALL

10-32 UNF THRU ALL

✓ Ø .209 X 90°, BOTTOM SIDE

✓ Ø .212 X 90°, TOP SIDE

1.280

2.000

TopLine[®]

TITLE C7-GRAPHITE-624-M
GRAPHITE TOOL

SCALE	SIZE	DRAWING NO.	REV
1.5:1	A	722570	A

DO NOT SCALE DRAWING

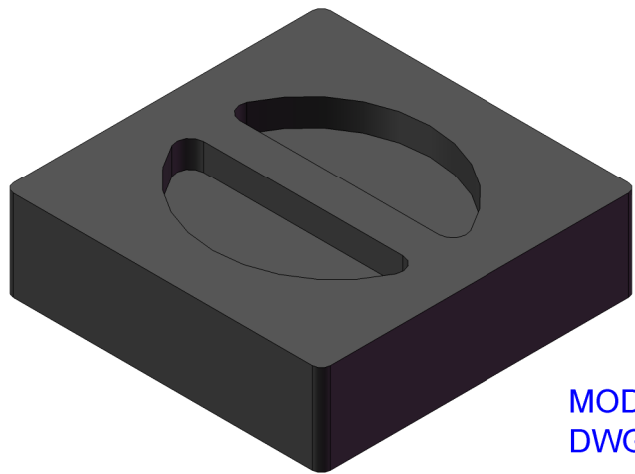
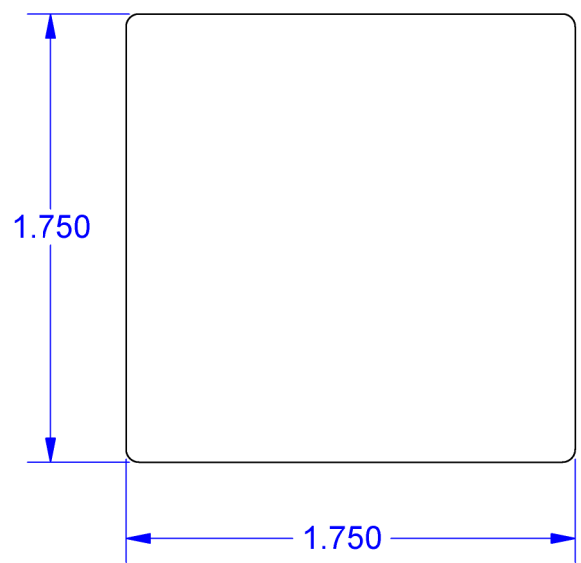
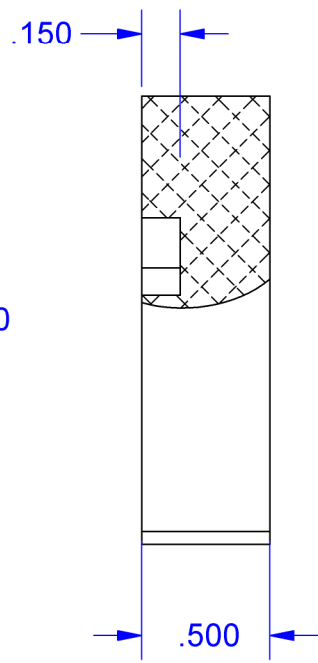
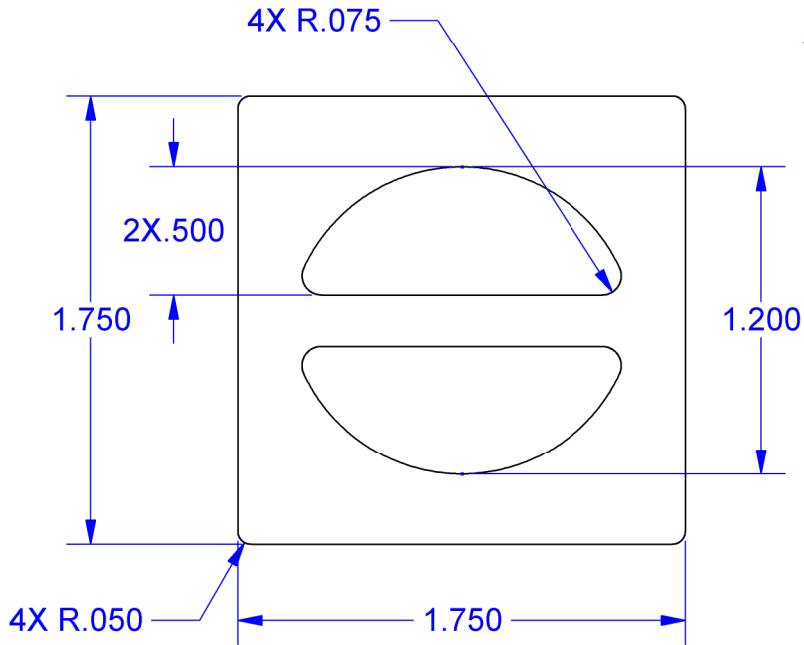
SHEET 6 OF 15

**C7-WEIGHT-A
700150**

TOP VIEW

SIDE VIEW

BOTTOM VIEW



**MODEL
DWG 700150**

NOTES: (UNLESS OTHERWISE SPECIFIED).

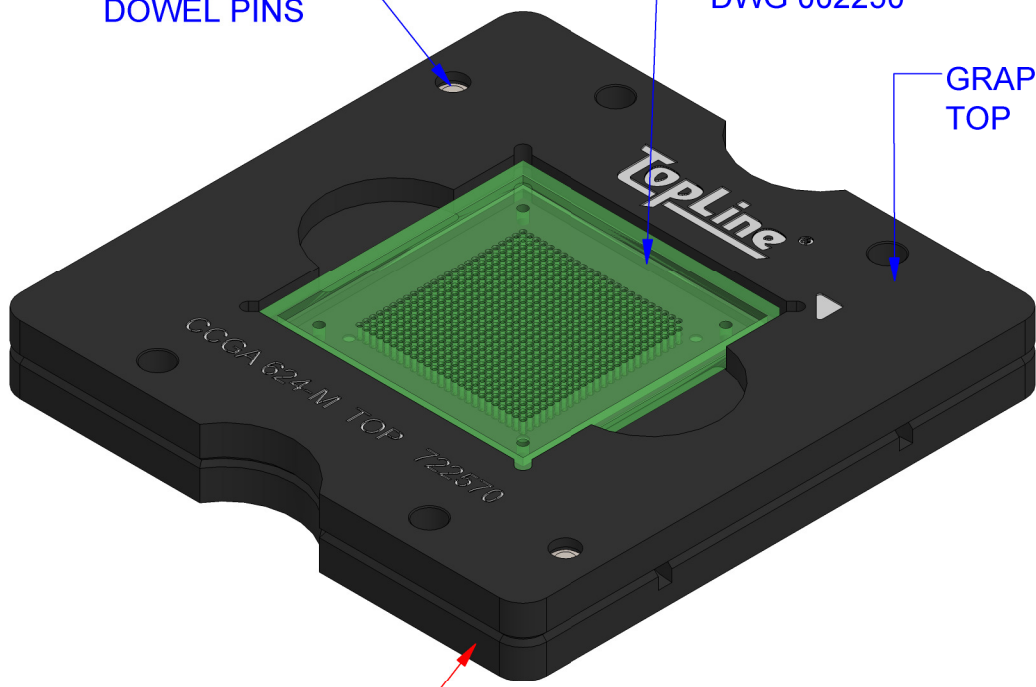
- 1) DIMENSIONS: INCHES.
- 2) MATERIAL: GRAPHITE.
- 3) OMNI-DIRECTIONAL.
- 4) APPLICATION: APPLIES PRESSURE TO COLUMNS.

TopLine [®]			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
2:1.5	A	722570	A
DO NOT SCALE DRAWING			SHEET 7 OF 15

ALIGNMENT
DOWEL PINS

FLIP-PACK®
DWG 002250

GRAPHITE
TOP



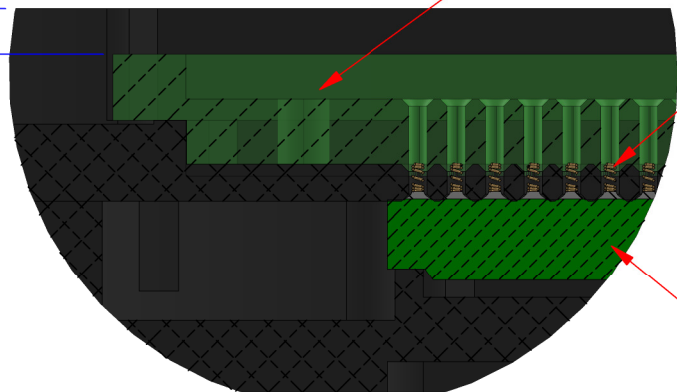
GRAPHITE
BASE

FLIP PACK (R)

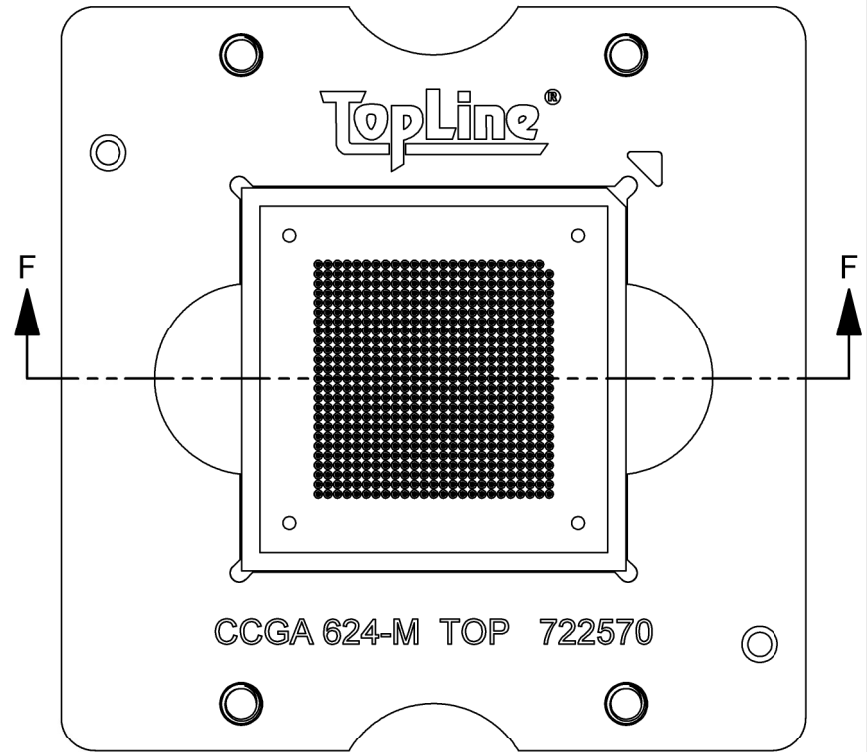
COLUMNS

SUBSTRATE

.059

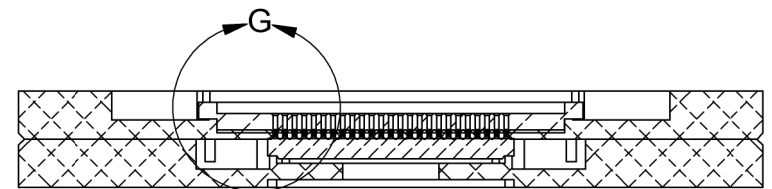


DETAIL G
SCALE 4 : 1



CCGA 624-M TOP 722570

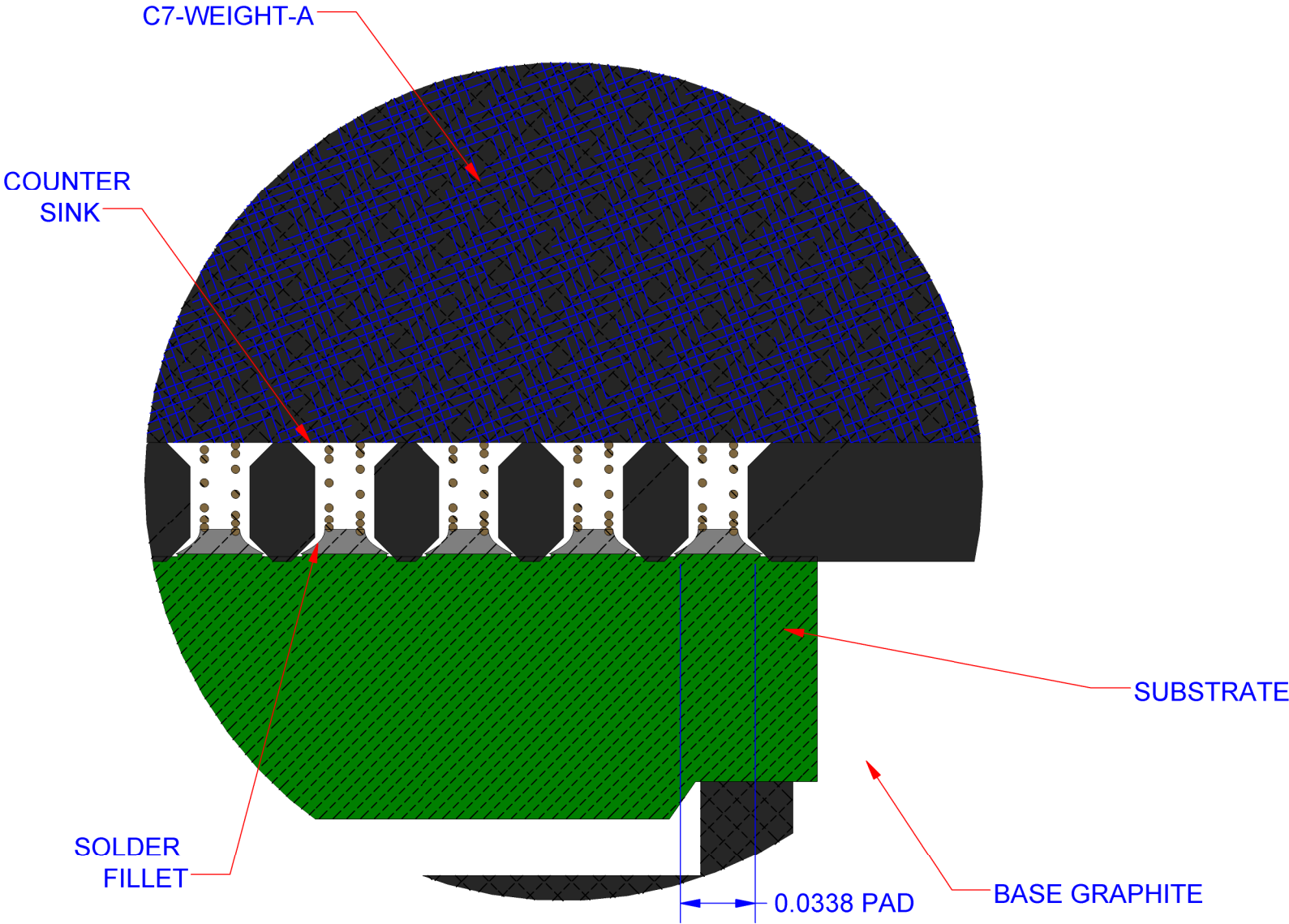
TWO SECTIONS
GRAPHITE
SEATED TOGETHER



SECTION F-F

TopLine®			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
1:1	A	722570	A
DO NOT SCALE DRAWING			SHEET 8 OF 15

STACK-UP DIAGRAM



DETAIL Q
SEE SHEET 12

TopLine [®]			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
16:1	A	722570	A
DO NOT SCALE DRAWING			SHEET 9 OF 15

EXPLODED SIDE VIEW

FLIP-PACK[®]
U.S. PATENT 9,629,259

COLUMNS
X 624

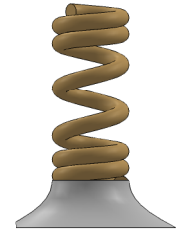
GRAPHITE
TOP

CCGA

GRAPHITE
BASE

PADS

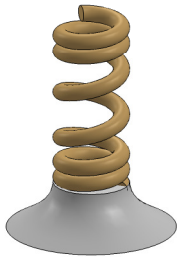
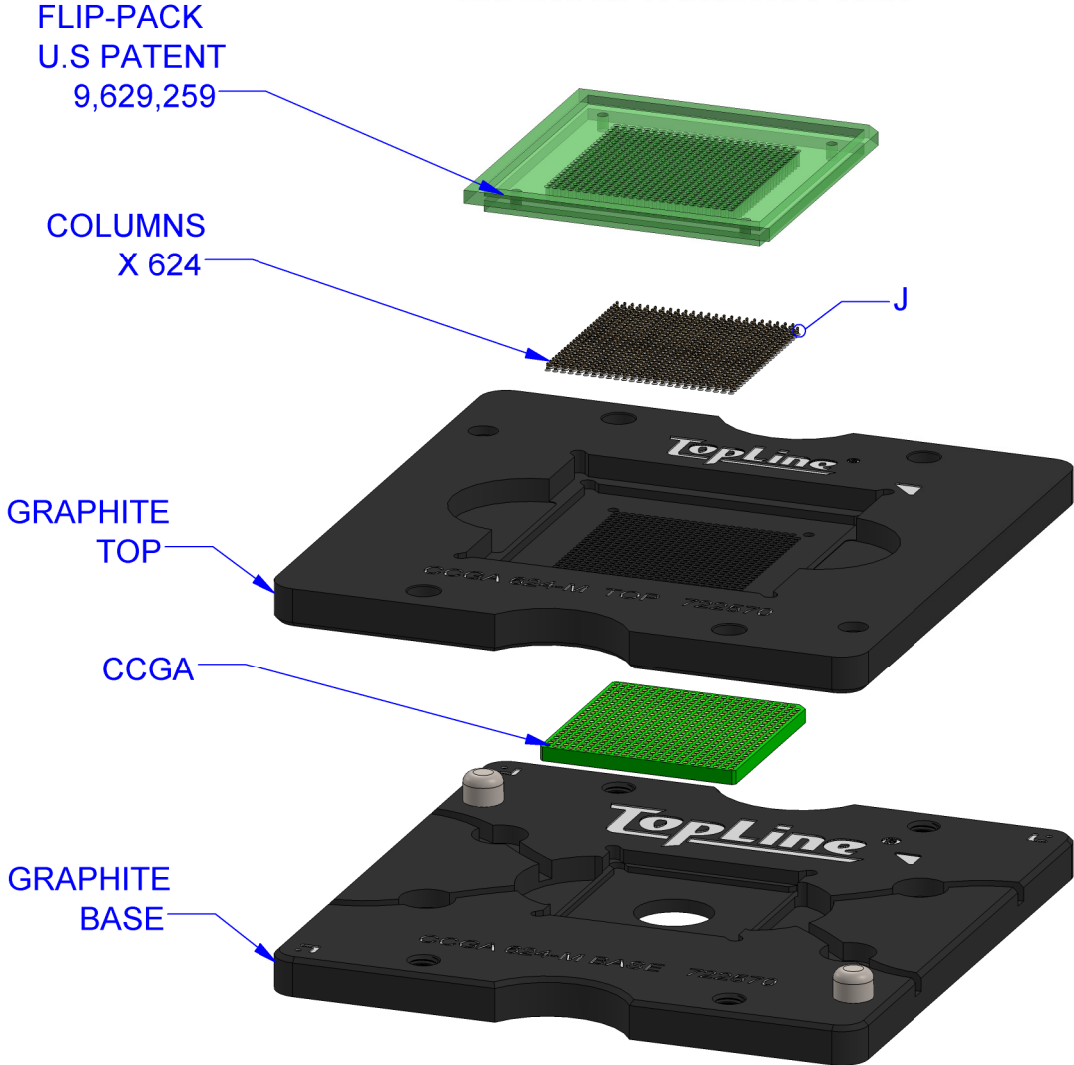
LID (COVER)



DETAIL H
SCALE 25 : 1

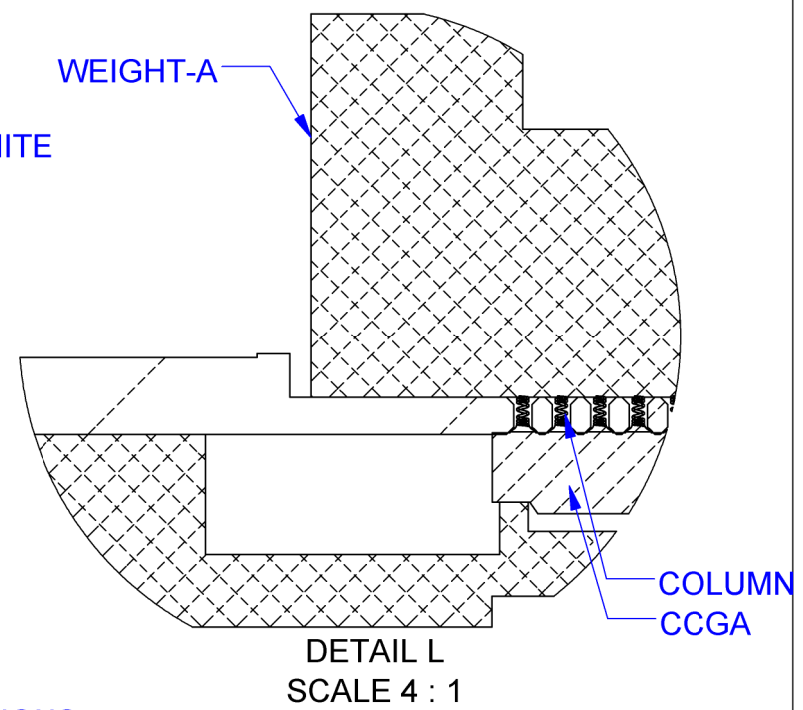
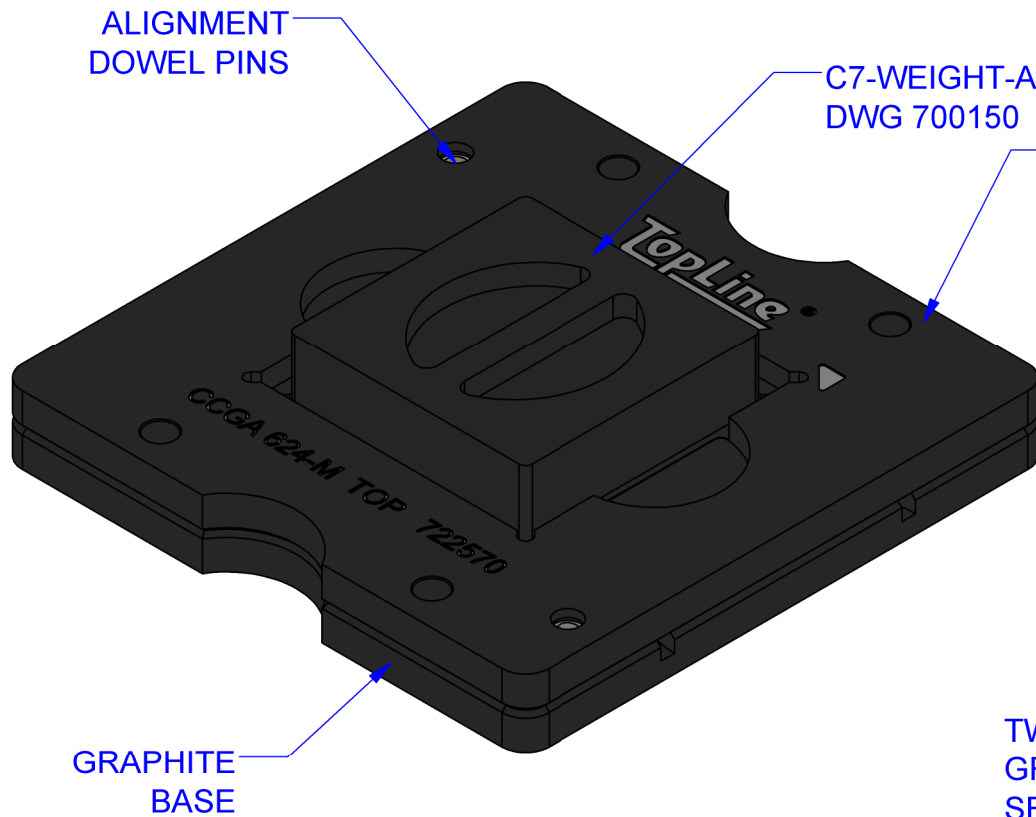
TopLine[®]			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
1:1	A	722570	A
DO NOT SCALE DRAWING			SHEET 10 OF 15

EXPLODED ISOMETRIC VIEW

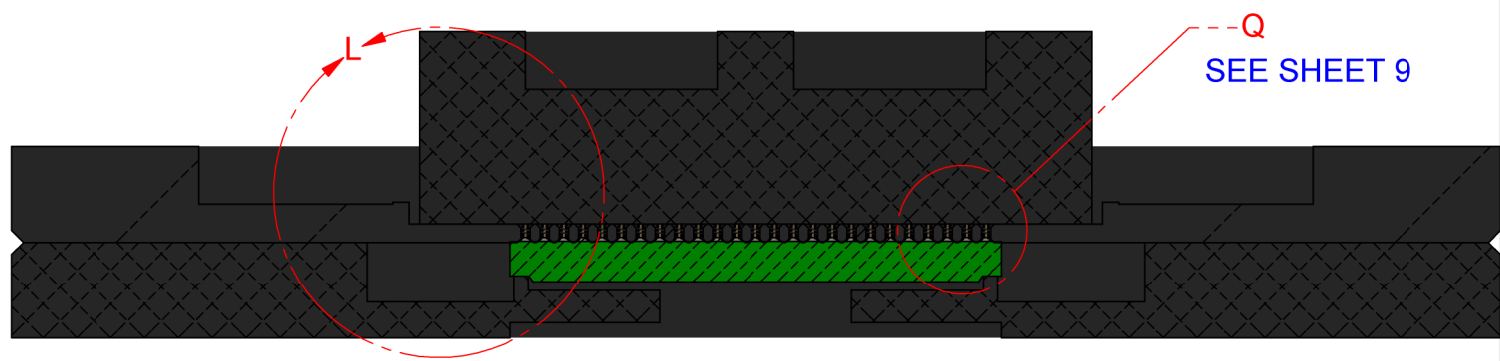
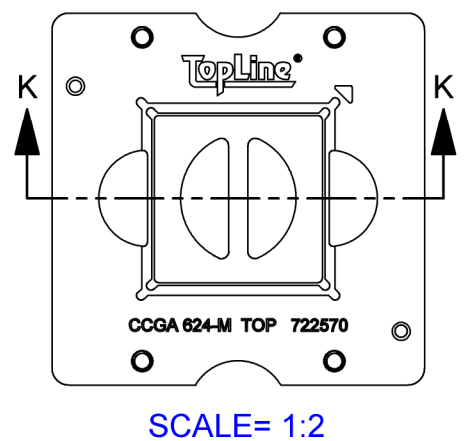


DETAIL J
SCALE 25 : 1

TopLine[®]			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
0.85:1	A	722570	A
DO NOT SCALE DRAWING			SHEET 11 OF 15



TWO SECTIONS
GRAPHITE
SEATED TOGETHER



SECTION K-K
SCALE 2 : 1

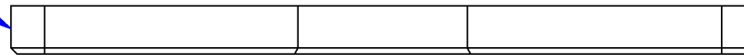
TopLine [®]			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE 1:1	SIZE A	DRAWING NO. 722570	REV A
DO NOT SCALE DRAWING			SHEET 12 OF 15

EXPLODED SIDE VIEW

C7-WEIGHT-A
DWG 700150



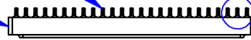
GRAPHITE
TOP



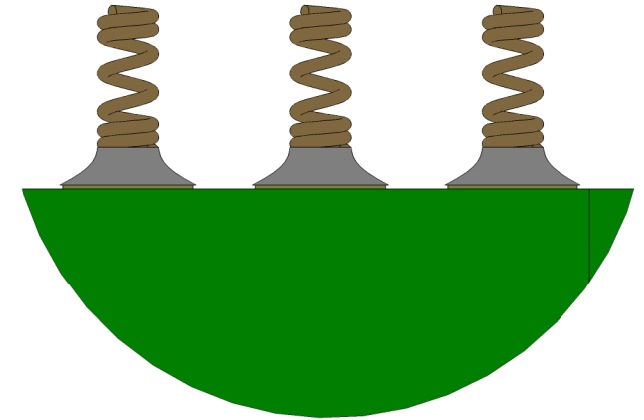
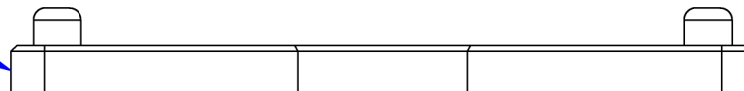
COLUMNS
X 624

CCGA

M



GRAPHITE
BASE

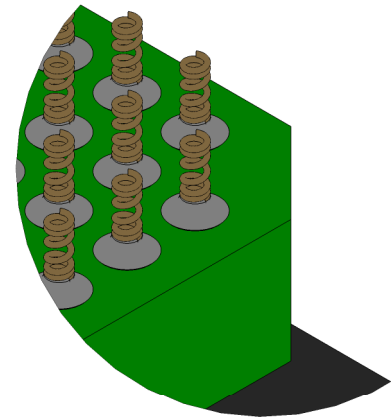
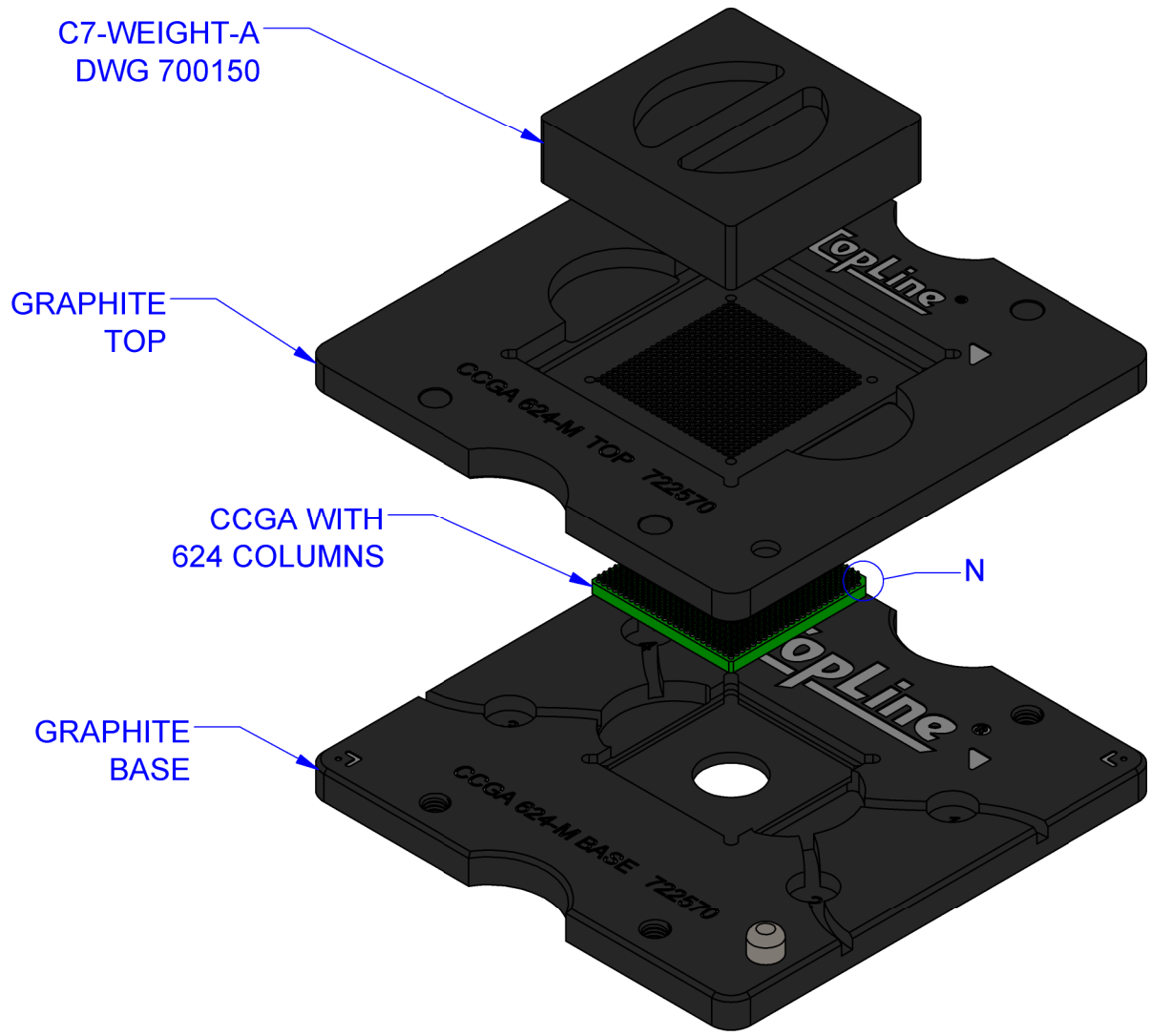


DETAIL M
SCALE 20 : 1

Sn63Pb37 FILLET
AFTER REFLOW

TopLine [®]			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
1:1	A	722570	A
DO NOT SCALE DRAWING			SHEET 13 OF 15

EXPLODED ISOMETRIC VIEW

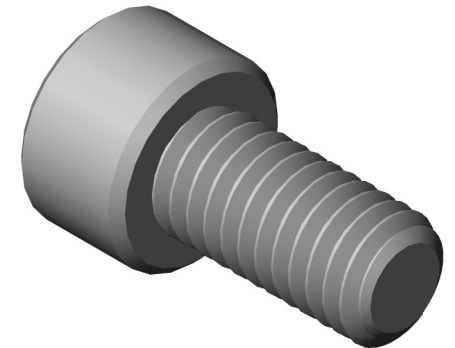
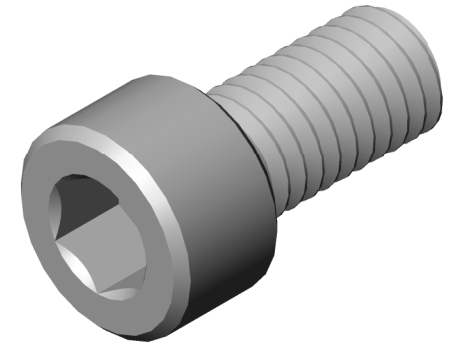
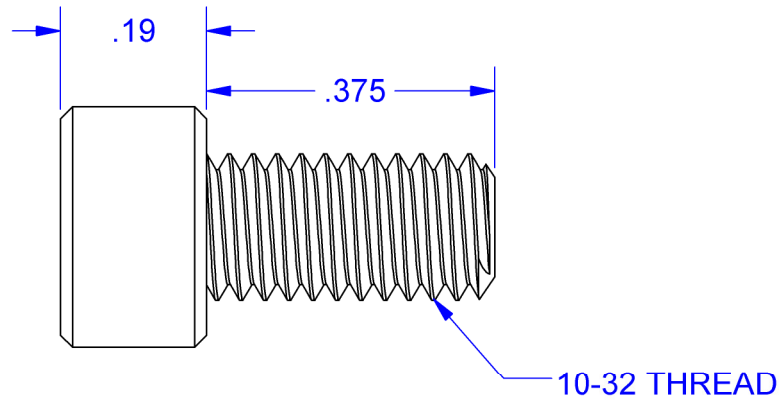
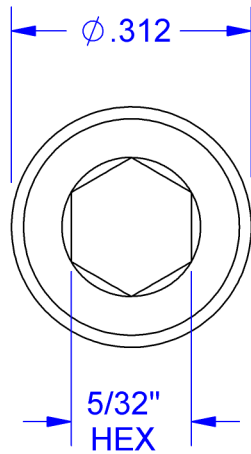


DETAIL N
SCALE 10 : 1
Sn63Pb37 FILLET
AFTER REFLOW

TopLine [®]			
TITLE		C7-GRAPHITE-624-M GRAPHITE TOOL	
SCALE	SIZE	DRAWING NO.	REV
0.85:1	A	722570	A
DO NOT SCALE DRAWING			SHEET 14 OF 15

CAP SCREW DWG 704051

MODELS



NOTES:

- 1) DIMENSIONS: INCH (UNLESS OTHERWISE SPECIFIED).
- 2) MATERIAL: SEE TABLE.
- 3) THREAD: SEE TABLE.
- 4) COLOR: STAINLESS.

DRILL TABLE

MATERIAL	THREAD	MAX OD	TAP DRILL START HOLE	CL HOLE CLOSE FIT	DWG
STAINLESS	10-32	0.190"	0.156"	0.206"	704051

TopLine[®]

TITLE				C7-GRAPHITE-624-M GRAPHITE TOOL			
SCALE	SIZE	DRAWING NO.		REV			
4:1	A	722570		A			
DO NOT SCALE DRAWING						SHEET 15 OF 15	