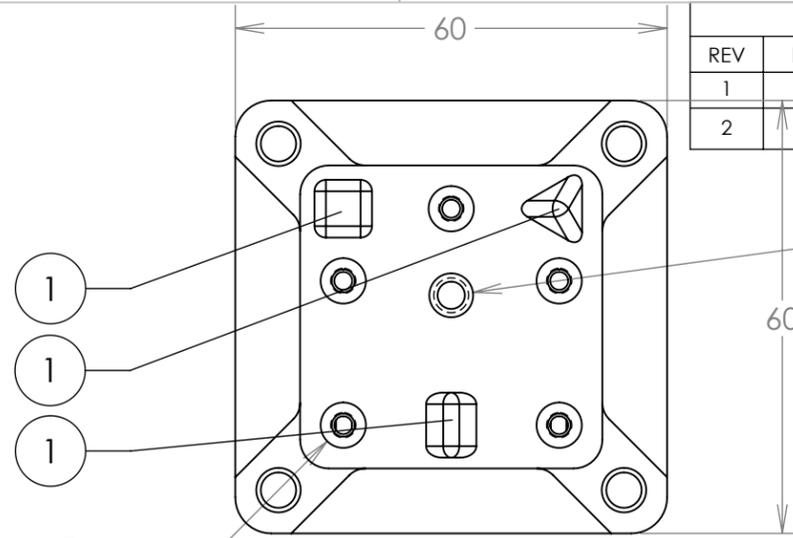


This drawing indicates overall size and a few key dimensions, but is generally defined by the solid model.

Features 2 capture 5/32" silicon nitride balls (bonded in); they should locate with respect to features 1 (a kinematic clamp) within 0.025mm of the solid model definition.

Stock is composed of Ti 6Al-4V and 6061-T6, permanently screwed together with M3x0.5 titanium flat heads, 6mm long. Machine to size after screwing stock together.

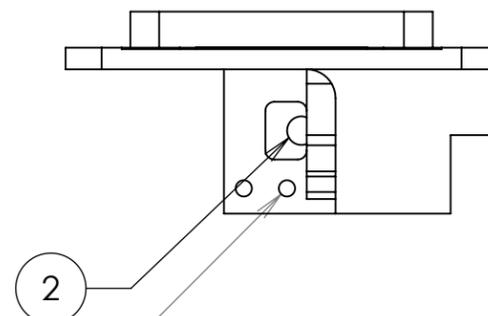
REVISIONS				
REV	DWG	CHK	DATE	DESCRIPTION
1	JHS	JHS	2011-06-10	Initial drawing.
2	JHS	JHS	2011-12-15	Separate into two material slabs, permanently screwed together, added lightening feature



$\phi 3.80 \nabla 15.88$   
 $10-24 \text{ UNC } \nabla 12.70$   
 $\sphericalangle \phi 6.10 \times 90^\circ, \text{ NEAR SIDE}$

$R1.987^{+0.015}_0$   
 TYP. FOR FEATURES 2  
 (CAPTURES 5/32" BALL)

$5X \phi 3.20 \nabla 5$   
 $\sphericalangle \phi 6.30 \times 90^\circ$   
 $\square \phi 6.30 \nabla 1.50$

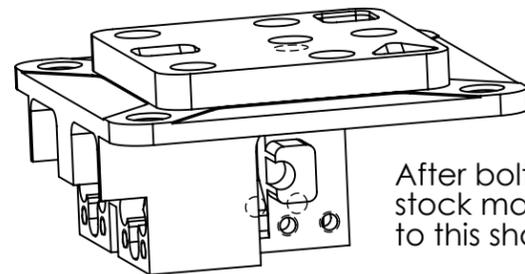


$2X \phi 2.26 \nabla 7.60$   
 $4-40 \text{ UNC } \nabla 5.69$

$4X \phi 2.26 \nabla 7.60$   
 $4-40 \text{ UNC } \nabla 5.69$

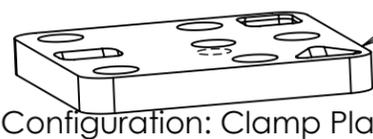
$8^{0}_{-0.05}$  28

$2X \phi 2.26 \nabla 7.60$   
 $4-40 \text{ UNC } \nabla 5.69$



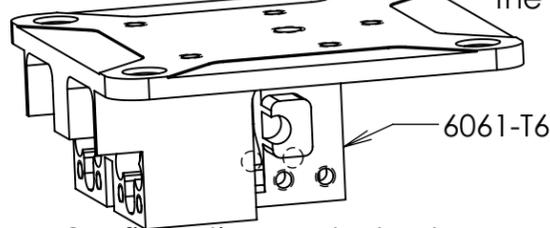
Configuration: Default

After bolting Ti and Al stock materials, machine to this shape as one part



Configuration: Clamp Plate

Ti 6Al-4V  
 Modeled as two solid bodies in one part, to separate the materials.



Configuration: Under body

6061-T6

MATERIAL	Ti 6Al-4V (clamp plate) 6061-T6 (under body)	
SURFACE TREATMENT		
DIMENSIONS IN MM. UNLESS OTHERWISE SPECIFIED:		
TOLERANCES	X.X ± 0.5	FRAC. ± 1/64
	X.XX ± 0.1	ANGLES ± 1.00°
	X.XXX ± 0.05	FINISH $\sqrt[3.2]{\mu\text{m}}$

**ERNEST ORLANDO LAWRENCE**  
**BERKELEY NATIONAL LABORATORY**  
 UNIVERSITY OF CALIFORNIA - BERKELEY

kin\_seat

DWG BY	Joe Silber	DATE	2011-06-10
CHK BY	Joe Silber	DATE	2011-06-10
APR BY	Joe Silber	DATE	2011-06-10

THREADS ARE CLASS 2  
 CHAMFER ENDS OF ALL SCREW THREADS 30°  
 CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS  
 BREAK EDGES .016 MAX. ON MACHINED WORK  
 REMOVE BURRS, WELD SPLATTER & LOOSE SCALE  
 IN ACCORDANCE WITH ASME Y14.5M & B46.1

SER NO.	SCALE: 1:1	SHEET 1 OF 1			
PROJECT NO.	PROJECT NAME	CATEGORY CODE	DWG NO.	SIZE	REV.
				B	2