

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.

Machine locating nubs to align clamp plate with underbody.

5X  $\phi$  3.20  $\nabla$  5  
 $\sphericalangle$   $\phi$  6.30 X 90°  
 $\sqsubset$   $\phi$  6.30  $\nabla$  1.50

(1)  
(1)  
(1)

4X  $\phi$  3.45 THRU ALL  
 8-32 UNC THRU ALL

CLAMP PLATE:  
 $\phi$  5.50 THRU

UNDERBODY:  
 $\phi$  3.80  $\nabla$  15.88  
 10-24 UNC  $\nabla$  12.70  
 $\sphericalangle$   $\phi$  6.10 X 90°, NEAR SIDE

R1.987<sup>+0.015</sup><sub>0</sub>  
 TYP. FOR FEATURES (2)  
 (CAPTURES 5/32" BALL)

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

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

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

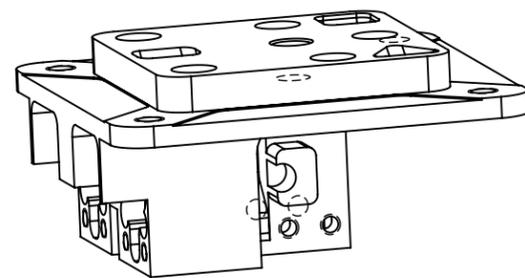
(2)

(2)

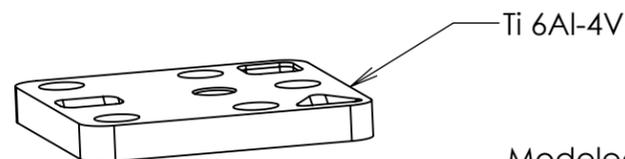
(2)

(2)

(2)

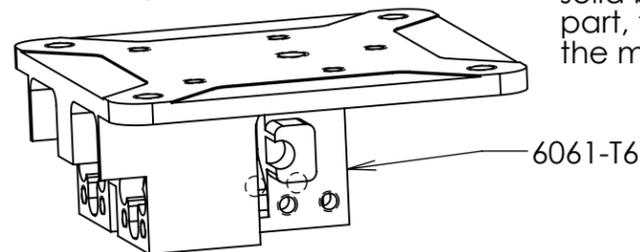


Configuration: Default

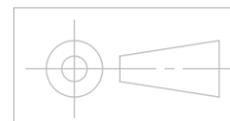


Configuration: Clamp Plate

Modeled as two solid bodies in one part, to separate the materials.



Configuration: Under body



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 $\sqrt[3.2]{\mu\text{m}}$

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

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

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

HFT  
 kin\_seat

SER NO.	SCALE: 1:1	SHEET 1 OF 1		
PROJECT NO.	PROJECT NAME	CATEGORY CODE	DWG NO.	SIZE REV.
				B 0003