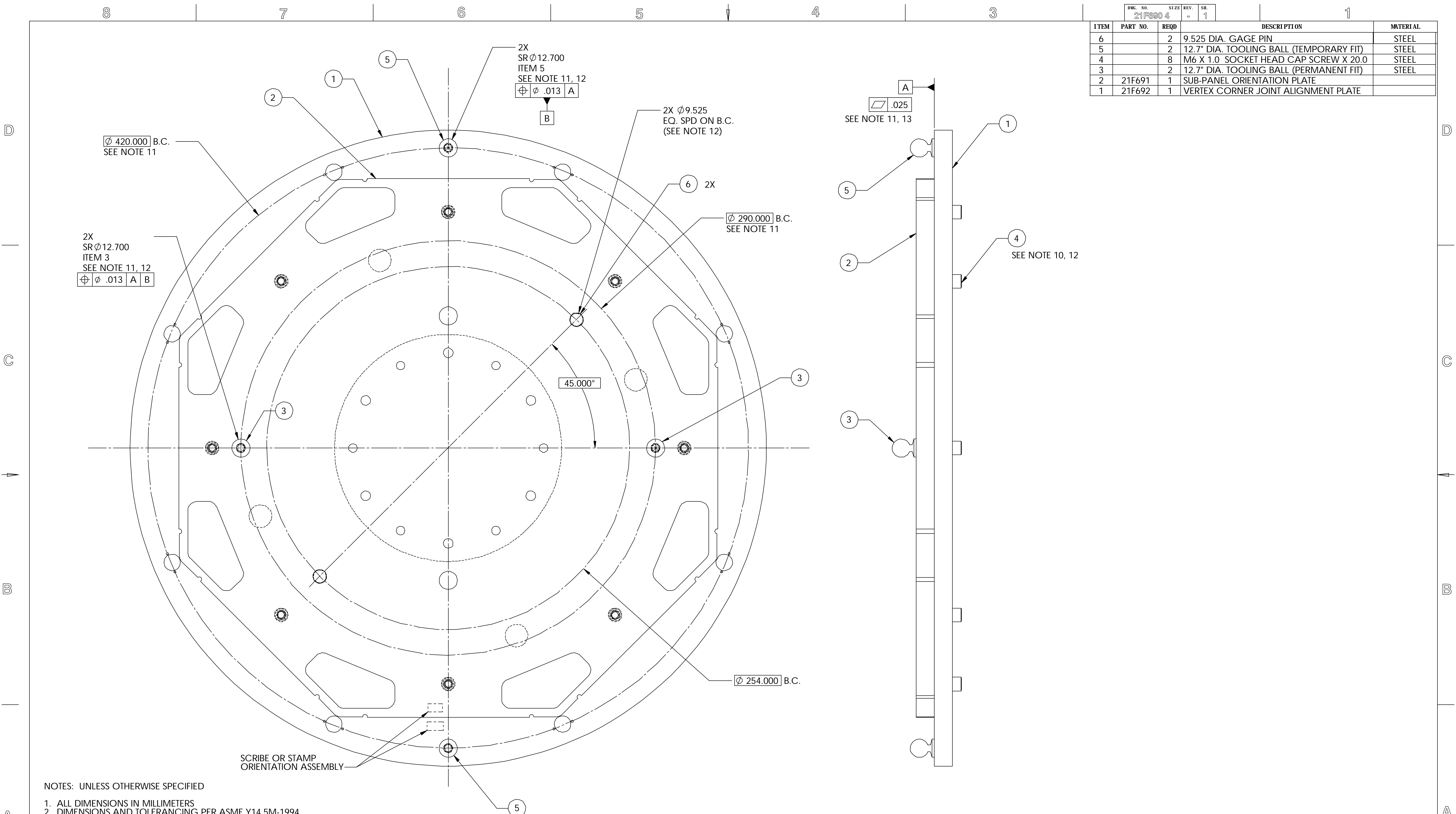


ITEM	PART NO.	REQD	DESCRIPTION	MATERIAL
6		2	9.525 DIA. GAGE PIN	STEEL
5		2	12.7" DIA. TOOLING BALL (TEMPORARY FIT)	STEEL
4		8	M6 X 1.0 SOCKET HEAD CAP SCREW X 20.0	STEEL
3		2	12.7" DIA. TOOLING BALL (PERMANENT FIT)	STEEL
2	21F691	1	SUB-PANEL ORIENTATION PLATE	
1	21F692	1	VERTEX CORNER JOINT ALIGNMENT PLATE	



NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL DIMENSIONS IN MILLIMETERS
2. DIMENSIONS AND TOLERANCING PER ASME Y14.5M-1994
3. SURFACE TEXTURE PER ANI/ASME B 46.1-1985
4. REMOVE ALL BURRS AND BREAK SHARP EDGES TO A MAXIMUM OF .38
5. ALL INSIDE CORNERS TO BE .38 RADIUS MAX
6. COUNTERSINK 82 DEGREES ALL TAPPED HOLES TO MAJOR DIAMETER
7. COUNTERSINK 82 DEGREES APPROXIMATELY .38 DEEP ALL DRILLED HOLES
8. PARTS TO BE THOROUGHLY CLEANED TO REMOVE ALL OIL, GREASE, DIRT AND CHIPS
9. TORQUE SOCKET HEAD CAP SCREWS TO 24.3in-Lbs (2.0 ft-Lbs) FOR ALUMINUM PLATE WITH HELICOIL
10. APPLY LOCKTITE THREADLOCK BLUE TO THREADS TO PREVENT THEM FROM LOOSENING
11. DIMENSIONS AND TOLERANCES ARE BASED UPON INDIVIDUAL PART TOLERANCES, AND ARE REFERENCE
12. ANGULARLY ORIENT ITEM 1 AND 2 USING TOOLING BALLS, MATCH DRILL AND PIN TOGETHER, BOLT PLATES TOGETHER
13. CMM INSPECTION REQUIRED; INSPECTION REPORTS PROVIDED TO HYTEC FOR REVIEW AND APPROVAL. INSPECTION TEMPERATURE MUST BE INDICATED

REV	DWG	CHK	ZONE	DATE	CHANGES

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER. NO.
TOLERANCES	X.X ± 0.5	FRAC. ± 1/64	ACCT. NO.	NO. REQD.
	X.XX ± 0.25	ANGLES ± 30°	DATE ISSD	DATE REQD.
	X.XXX ± 0.013	FINISH 1.6	SURFACE TREATMENT	
DO NOT SCALE PRINT		INDEX METHOD TAG		
THREADS ARE CLASS 2		PROJECT NAME	ATL-1P-ED-XXXX	
CHAMFER ENDS OF ALL SCREW THREADS 30°		PROJECT NO.	US ATLAS SILICON SUBSYSTEM	
CUT ROUNDS, 1.5 THREAD RELIEF ON MACHINED THREADS		DWG. BY	W. K. MILLER	
BREAK EDGES, .016 MAX. ON MACHINED WORK		CHK. BY	BILL WILDS	
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		DATE	4/16/2002	
IN ACCORDANCE WITH ASME Y14.5m & B46.1		APR. BY	E. ANDERSSSEN	
		DATE	4/16/2002	

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY				
UNIVERSITY OF CALIFORNIA - BERKELEY #				
ATLAS PIXEL DETECTOR SPACEFRAME BOND FIXTURE PRE-ALIGNMENT ASSEMBLY				
MICROFILMED:	DWG. TYPE	SHOWS ON	SCALE:	DO NOT SCALE PRINTS
	ASSEM	21F688	1:1.25	
PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	DWG. NO.	SIZE
	P1AP-11	AP6250	21F6904	REV.
		SHEET 1 OF 1		