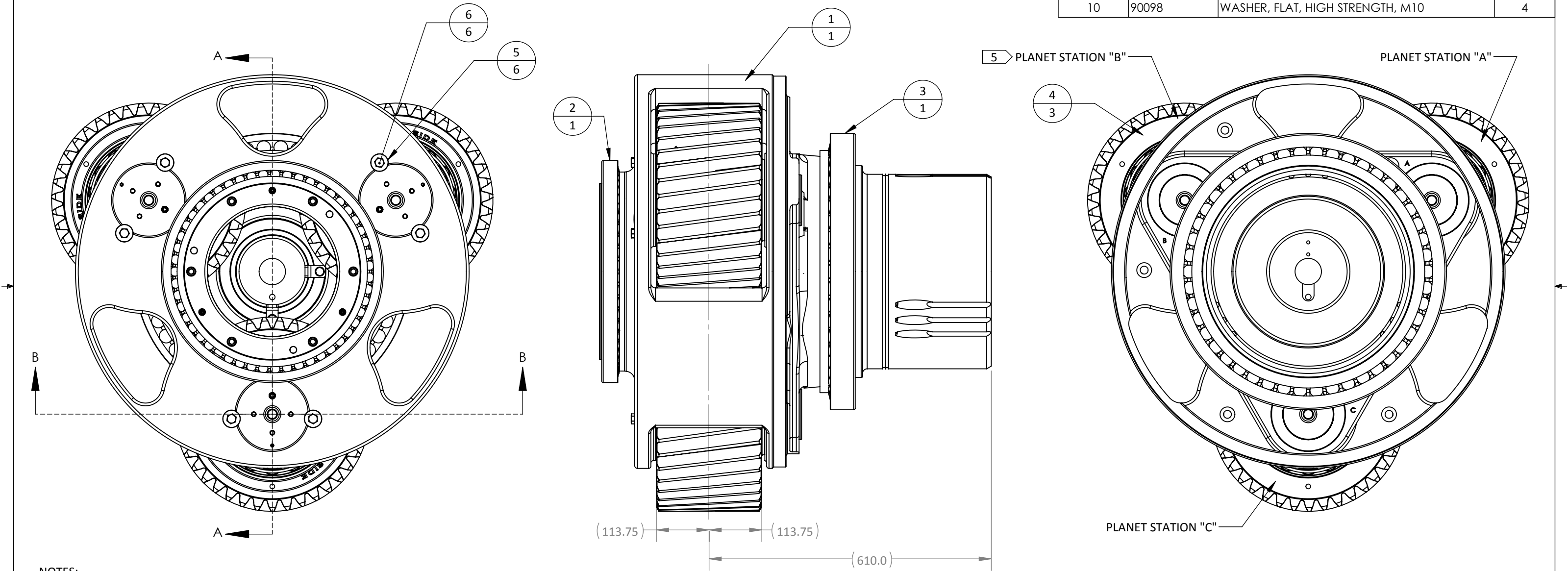


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	254594	PLANET CARRIER STAGE 1 (FINAL MACH & ASS'Y)	1
2	93231	BEARING SINGLE ROW TAPER (PLC)	1
3	93230	BEARING PLC A UPWIND	1
4	254595	PLANET GEAR ASS'Y (CARRIER)	3
5	90246	WASHER, M24 LG DIA, ZINC PLTD	6
6	90142	HEX HD CAP SCREW, M12-1.25 x 30 GR 8.8	6
7	251546	BRACKET, SENSOR MOUNTING	2
8	251564	BRACKET, SENSOR MOUNTING	2
9	90128	HEX HD CAPSCREW, M10 x 20, GR 8.8	4
10	90098	WASHER, FLAT, HIGH STRENGTH, M10	4



NOTES:

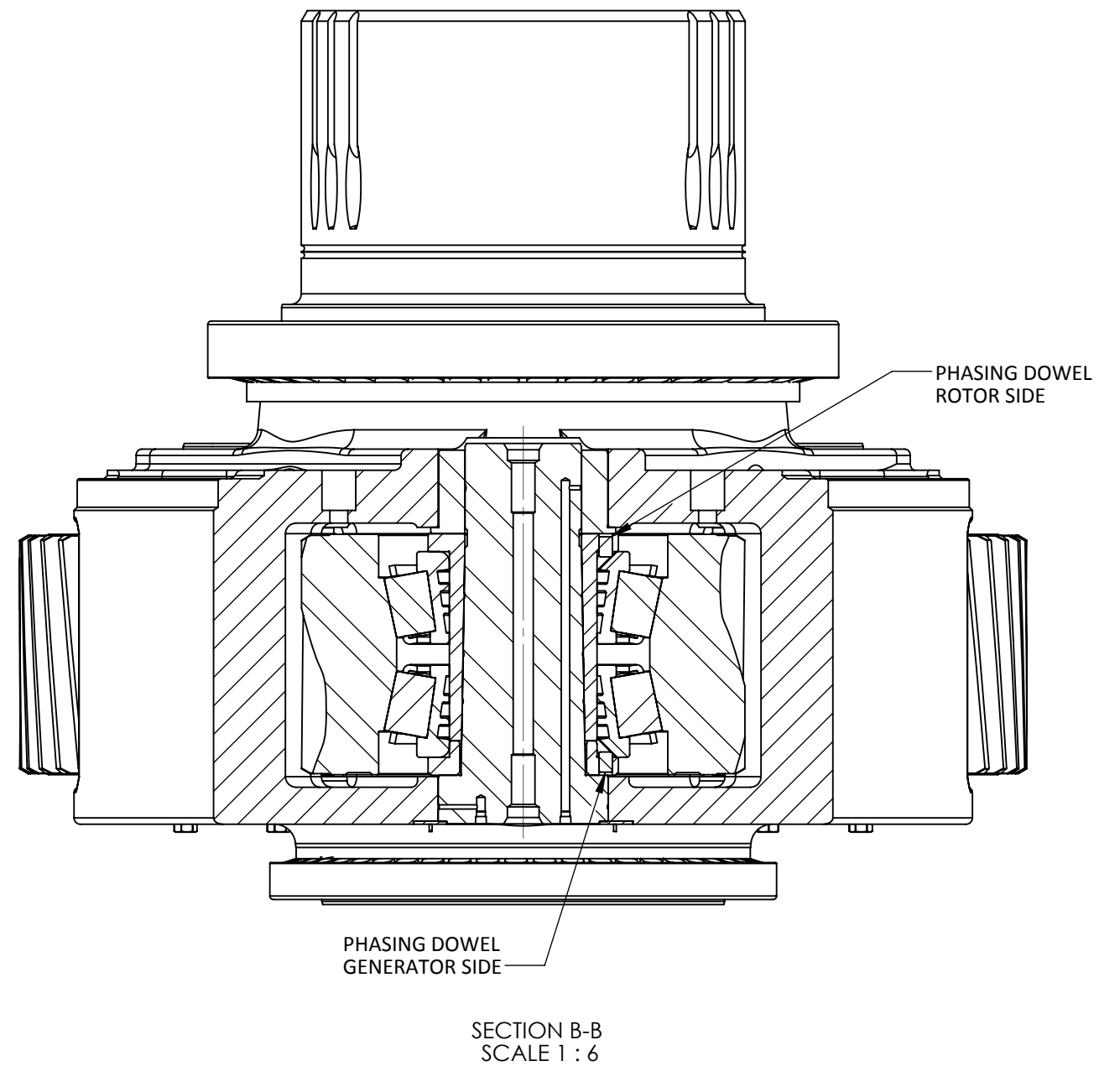
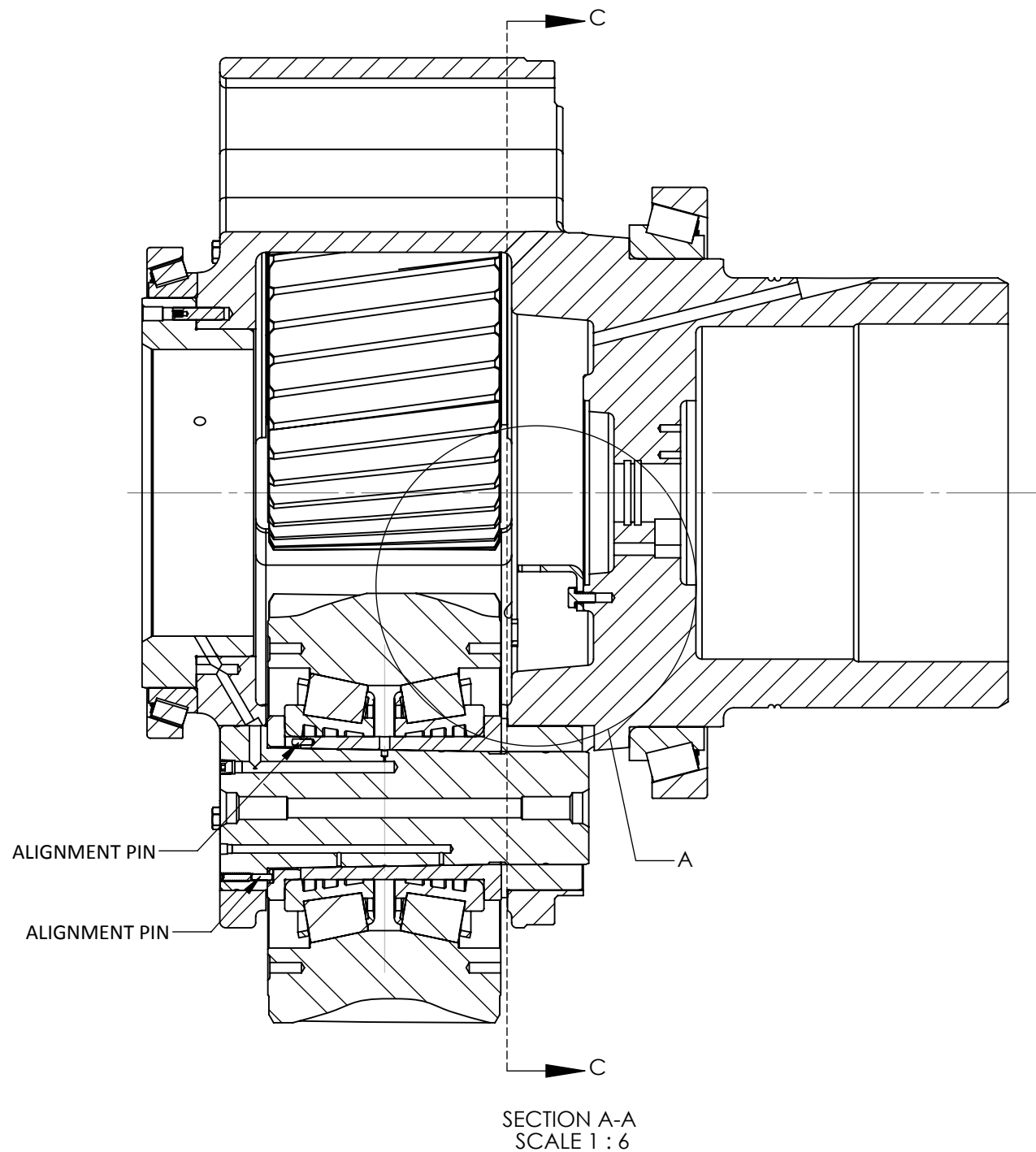
- USE LOCTITE 577 THREAD SEALANT ON ALL THREADS PER INSTRUCTIONS
- LUBRICATION SYSTEM TO BE FLUSHED CLEAN PRIOR TO ASSEMBLY
- FOR ASSEMBLY, SEE DOCUMENT 1509-DC-035 PLANET STAGE ASSEMBLY PROCEDURE
- INSTRUMENTATION TO BE COMPLETED PRIOR TO ASSEMBLY PER LAYOUT DRAWINGS 1551-LY-111, 1551-LY-112, AND 1551-LY-121.

5. THE PLANET GEAR ASSEMBLY WITH THE MOST INSTRUMENTATION SHALL BE DESIGNATED AS UNIQUE ASSEMBLY "B" AND MUST BE INSTALLED INTO PLANET STATION "B" OF THE CARRIER.

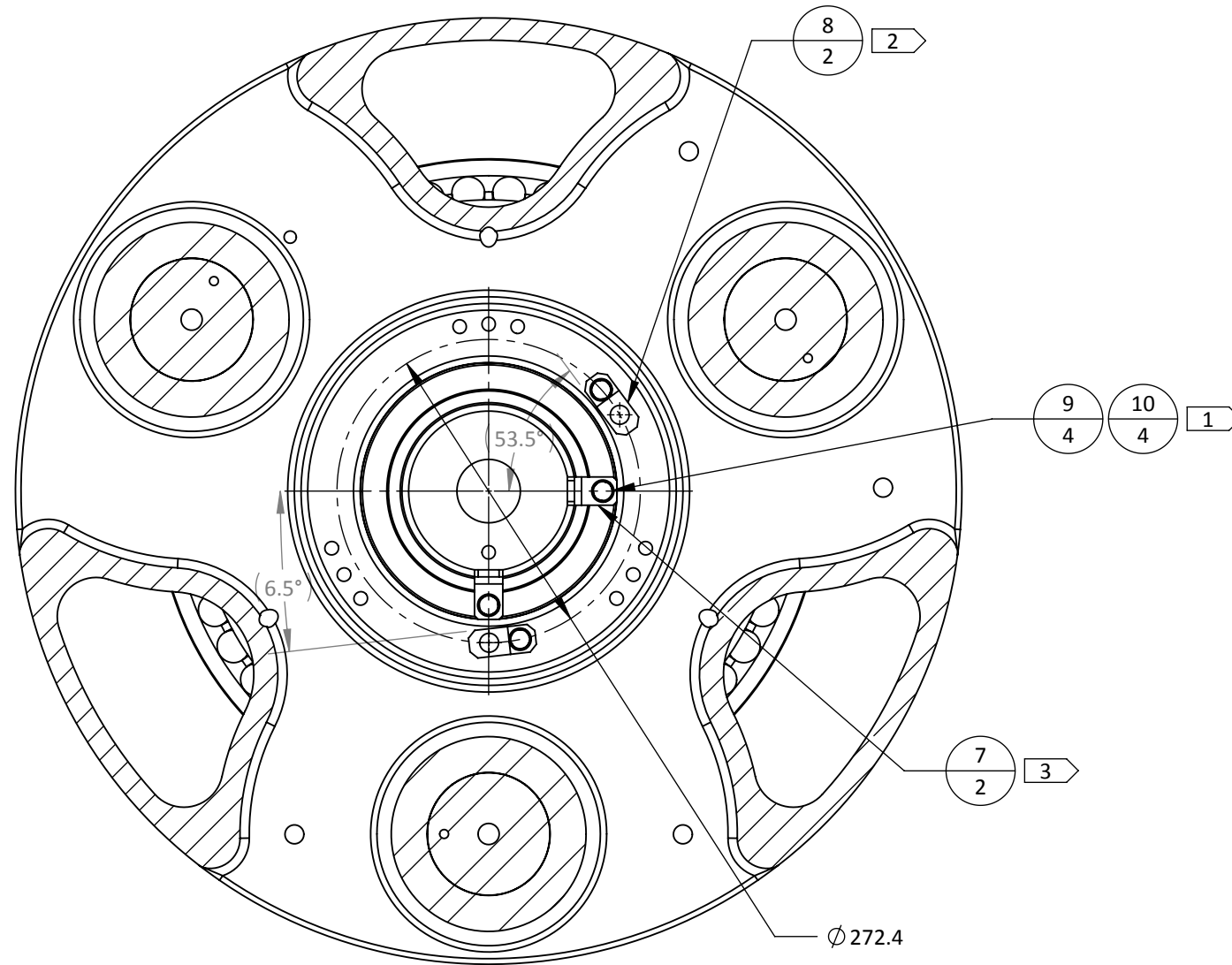
REV	CHANGED FROM	BY	DATE	APRD
A	PRE-RELEASE	CPS	1/14/13	
B	CHANGES PER NREL DRW REVIEW. UPDATE BORDER	CPS	3/14/13	
C	RELEASE FOR PRODUCTION	CPS	4/19/13	
D	CHANGES PER MANUFACTURER REVIEW AND INSTRUMENTATION	CPG	3/20/14	
E	CHANGES PER MFG REVIEW	CPG	1/18/16	

REPORT ERRORS & CHANGES REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN MILLIMETERS. UNSPECIFIED TOLERANCES: DECIMALS: FINISH: ANGLES:		
X. ±1.0 .X ±0.5 .XX ±0.25	6.3 $\sqrt{\mu\text{m Ra}}$	$\angle \pm 0.5^\circ$
COPYRIGHT © NOT TO BE REPRODUCED OR USED TO MAKE OTHER DRAWINGS OR MACHINERY		
DRAWN	CPS	DATE: 1/14/13
CHECKED	NJB	THIRD ANGLE PRJ

National Renewable Energy Laboratory		
TITLE: PLANET CARRIER BEARINGS AND PLANETS ASS'Y		
SIZE B	DWG. NO. 254714	REV E
SCALE: 1:8	WEIGHT: 1232.10 kgs	SHEET 1 OF 3



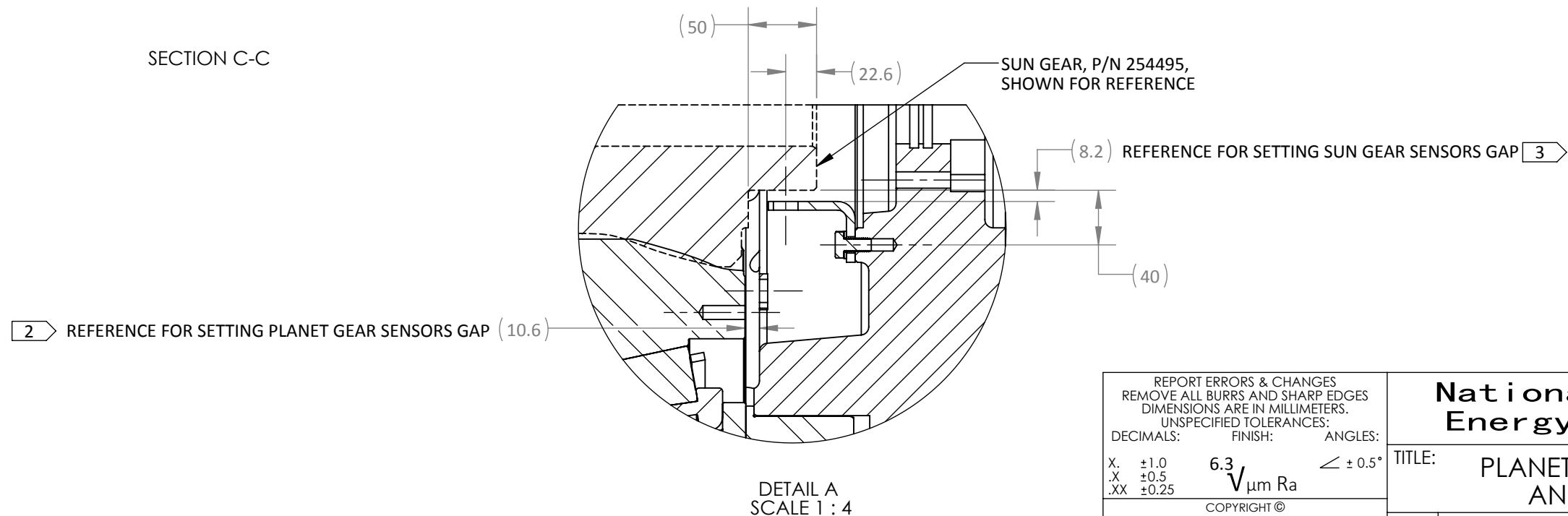
REPORT ERRORS & CHANGES REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN MILLIMETERS. UNSPECIFIED TOLERANCES: DECIMALS: FINISH: ANGLES:				National Renewable Energy Laboratory		
X. ±1.0 .X ±0.5 .XX ±0.25	6.3 $\sqrt{\mu\text{m Ra}}$	$\angle \pm 0.5^\circ$		TITLE: PLANET CARRIER BEARINGS AND PLANETS ASS'Y		
COPYRIGHT © NOT TO BE REPRODUCED OR USED TO MAKE OTHER DRAWINGS OR MACHINERY				SIZE B	DWG. NO. 254714	REV E
DRAWN	CPS	DATE: 1/14/13		SCALE: 1:6	WEIGHT: 1232.10 kgs	SHEET 2 OF 3
CHECKED	NJB	THIRD ANGLE PRJ				



SECTION C-C

SENSOR INSTALL NOTES:

1. WHEN INSTALLING THE SENSOR BRACKETS, PARTS 251546 AND 251564, APPLY A SMALL AMOUNT OF THREAD LOCKING LOCTITE TO THE THREADS OF 90128 AND TORQUE CAPSCREW TO 51 Nm / 451 in-lbf.
2. ADJUST SENSORS (NOT SHOWN) TO A DISTANCE OF 3 ± 2 MM FROM PLANAR FACE OF THE PLANET GEARS TO FACE ON SENSOR. SEE DETAIL A FOR REFERENCE. LOCK WITH JAM NUT SUPPLIED WITH SENSOR (REFER TO INSTRUMENTATION DRAWINGS).
3. ADJUST SENSORS (NOT SHOWN) TO A DISTANCE OF 3 ± 2 MM FROM CYLINDRICAL FACE OF THE SUN GEAR TO FACE ON SENSOR. SEE DETAIL A FOR REFERENCE. LOCK WITH JAM NUT SUPPLIED WITH SENSOR (REFER TO INSTRUMENTATION DRAWINGS).



REPORT ERRORS & CHANGES REMOVE ALL BURRS AND SHARP EDGES DIMENSIONS ARE IN MILLIMETERS. UNSPECIFIED TOLERANCES: DECIMALS: FINISH: ANGLES:			National Renewable Energy Laboratory		
X. ±1.0 .X ±0.5 .XX ±0.25	6.3 √ μm Ra	≤ ± 0.5°	TITLE: PLANET CARRIER BEARINGS AND PLANETS ASS'Y		
COPYRIGHT © NOT TO BE REPRODUCED OR USED TO MAKE OTHER DRAWINGS OR MACHINERY			SIZE B	DWG. NO. 254714	REV E
DRAWN CHECKED	CPS NJB	DATE: 1/14/13 THIRD ANGLE PRJ	SCALE: 1:6	WEIGHT: 1232.10 kgs	SHEET 3 OF 3