



SECTION A-A

NOTES:

- MATERIAL: AISI 4140 QUENCH AND TEMPER 269/321 BHN  
STEEL BAR OR TUBE
- IDENTIFY WITH PART NUMBER, SUPPLIER CODE AND NUMBER,  
MANUFACTURERS LOT NUMBER, AND REVISION LEVEL
- AFTER FINAL GRINDING WIDTH TO SIZE, SURFACE CRACK TESTING MUST  
BE COMPLETED BY MAGNETIC PARTICLE TESTING OR DYE PENETRANT  
TEST ON GROUND SURFACES PER ISO 6336-5. NO CRACKS ALLOWED  
(ALT: AGMA 2001-D04 GR. 3 - NO CRACKS ALLOWED)
- UNLESS SPECIFIED, FILLETS R3 AND CHAMFERS 1 x 45 °

MAKE FROM MODEL: 1509-GS-023-A

REV	CHANGED FROM	BY	DATE	APRD
A	PRE-RELEASE. REVIEWED PER 1509-ENC-004	JFC	10/25/12	
B	CHANGES PER REQUEST 1509-DDS-018-A & NREL DRW REVIEW	CPS	3/5/13	
C	CHANGES PER REQUEST 1509-DDS-018-A03	CPS	3/25/13	
D	CHANGES PER CUSTOMER REVIEW. RELEASE FOR PRODUCTION	CPS	4/18/13	

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 µm Ra	≤ ± 0.5°	
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NOT TO BE REPRODUCED OR USED TO MAKE OTHER DRAWINGS OR MACHINERY			
DRAWN	JFC	DATE: 10/25/12	
CHECKED	NJB	THIRD ANGLE PRJ	

<b>National Renewable Energy Laboratory</b>		
TITLE: BEARING SPACER, INNER HSS		
SIZE <b>B</b>	DWG. NO. <b>254556</b>	REV <b>D</b>
SCALE: 1:1	WEIGHT: 0.54 kgs	SHEET 1 OF 1