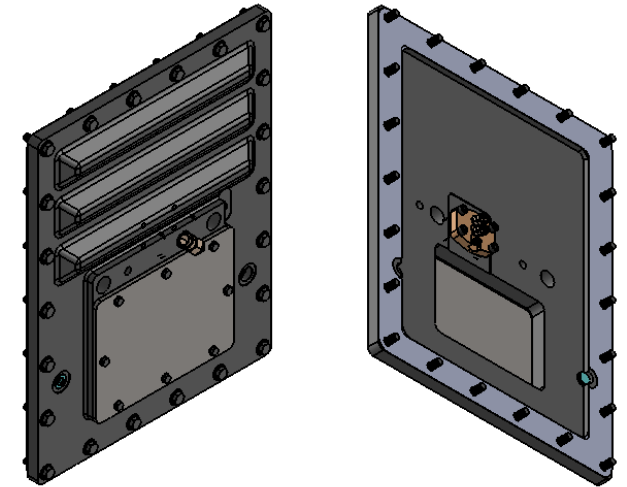


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	90098	WASHER, FLAT, HIGH STRENGTH, M10	8
2	90128	HEX HD CAPSCREW, M10 x 20, GR 8.8	8
3	90130	HEX HD CAPSCREW, M16 x 60, GR 8.8	22
4	90575	CAPSCREW, SOC HD, M12 x 45	4
5	90651	WASHER, FLAT, PLAIN, STEEL, M16	22
6	95406	O RING, 2.73 ID x .139 WD (PARKER# 2-232)	1
7	95407	STRAIGHT ELBOW, 1" - 1 1/16 NPT (PARKER # 16-12 C5OX-S)	1
8	95408	1" NPT HOLLW HEX HD PLUG	1
9	95409	NOZZLE, 1/4 NPT, 30 DEG FULL CONE, LOW FLOW (BETE# WL 1 1/2 30 DEG)	1
10	95423	NOZZLE BJ LOW FLOW 3/8 NPT 40 °FAN	2
11	251555	GASKET TOP COVER	1
12	251561	COVER, INSPECTION	1
13	251560	GASKET, INSPECTION COVER	2
14	254720	TOP COVER - REWORK	1
15	254923	MODIFIED BLANK FLANGE SAE 2 1/2	1



MODEL MADE FROM MODEL:1509-LS-103-A

REV	CHANGED FROM	BY	DATE	APRD
A	PRE-RELEASE	CPS	3/27/13	
B	RELEASE FOR PRODUCTION	CPS	5/10/13	

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 V μm Ra	≤ ± 0.5°	
COPYRIGHT ©			
NOT TO BE REPRODUCED OR USED TO MAKE OTHER DRAWINGS OR MACHINERY			
DRAWN	CPS	DATE: 3/27/13	
CHECKED	NJB	THIRD ANGLE PROJ	

National Renewable Energy Laboratory		
TITLE: ASS'Y, TOP COVER & MANIFOLD		
SIZE	DWG. NO.	REV
B	254924	B
SCALE: 1:10	WEIGHT: 125.65 kgs	SHEET 1 OF 1