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## NOTES:

1. DOUBLE BAG & TAG PER MIL-STD-130 AS: 65113-2A07936-101 AND APPLICABLE REV. LETTER.
  2. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M-1982.
  3. FN 2,3,4,5,6 & 7 SHALL BE CLEANED PER MIL-STD-1246, LEVEL 200A OR EQUIVALENT PRIOR TO WELDMENT.
  4. FN 2,3 & 5 SHALL BE CUT TO FIT ASSEMBLY INTO TOOLING FIXTURE FN 8.
  5. DIMENSIONS AND VIEWS REPRESENTS INSTALLATION IN FN 8 WITHOUT PANEL THERMAL ISOLATORS OF FN 2 AND FN 3.
  6. WELD PER SAE-AMS-STD-2219 CLASS B OR LAC 3853-050200 WITH He LEAK CHECK. FILLER ALLOY TO BE SPECIFIED IN WELD PROCEDURE. WELD ROOT PENETRATION OF FN 6 AND FN 7 TO BE .015 MINIMUM. WELD PROCEDURE TO BE APPROVED BY LMSS.
- POSITIVE GAS PURGE SHALL BE MAINTAINED DURING WELDMENT TO MINIMIZE CONTAMINATION. PENETRANT INSPECTION TO BE PERFORMED AFTER PROOF TEST AND LEAK CHECK.
7. CLEAN PER MIL-STD-1246 LEVEL 200A. INLET AND OUTLET QUICK CONNECTS SHALL BE PROTECTED WITH CAPS.

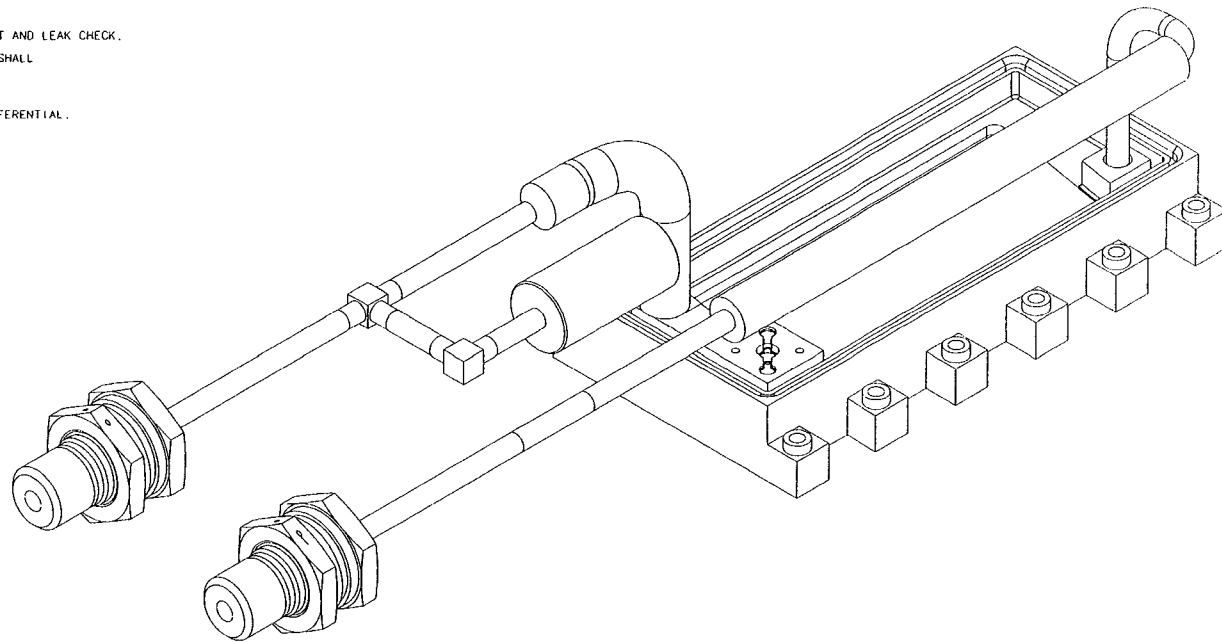
## PERFORMANCE:

8. LEAKAGE: 1X10E-6 SCCS HELIUM MAXIMUM AT ONE ATMOSPHERE PRESSURE DIFFERENTIAL.
9. TEMPERATURE: OPERATING ENVIRONMENT 15°C TO 50°C.  
NON-OPERATING ENVIRONMENT -20°C TO 65°C.  
FLUID TEMPERATURE 0.5°C TO 50°C.
10. PRESSURE: 121 PSIG MAXIMUM OPERATING PRESSURE.  
-15 PSIG MINIMUM OPERATING PRESSURE.  
242 PSIG PROOF.  
484 PSIG ULTIMATE.
11. PRESSURE DROP: 1.5±0.1 PSID (10.3 kpa ±0.7 kpa) AT 21 LB/HR  
(9.5 kg/hr) water at 0.5-45.5 °C.
12. FLUID: DEIONIZED WATER MIL-STD-1246A LEVEL 300.

## TESTING:

13. EACH ASSEMBLY SHALL BE SUBJECTED TO THE FOLLOWING TEST:
  - A) LEAK CHECK TO VERIFY MAXIMUM LEAKAGE RATE SPECIFIED HEREIN.
  - B) PROOF PRESSURE FOR A DURATION OF THREE (3) MINUTES MINIMUM.
  - C) LEAK CHECK.
  - D) VERIFICATION OF CLEANLINESS LEVEL SPECIFIED HEREIN.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APVD
	A	UPDATED CONFIGURATION	12/06/01	DF
		DELETED PAGE 3		
		WAS: PAGE 4, 15; PAGE 3		



## -101 HEAT EXCHANGER/ COOLANT PLUMBING ASSY

AR	QTY	CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL DESCRIPTION OR NOTE	MATERIAL SPECIFICATION	ZONE	FINO
			6	WELD FILLER METAL				9
			-601	TOOLING FIXTURE			5	8
			2A07758-101	HX TOP				7
			2A07759-101	HX BOTTOM				6
			2A07909-101	HX SUPPLY PLUMBING				5
			2A07908-101	FLOW REDUCER				4
			2A07899-101	LC SUPPLY ASSY				3
			2A07898-101	LC RETURN PLUMBING ASSY				2
			-101	PLUMBING ASSY				1

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION SPACE STATION BIOLOGICAL RESEARCH PROJECT AMES RESEARCH CENTER		UNLESS OTHERWISE SPECIFIED DIM ARE IN INCHES. TOLERANCES ON: FRACTIONS: ± 1/16 DECIMALS: .XX ± .01 ANGLES: ± 2 DEG	DATE 02/12/01 DWG. J. MIX APVD ENGRG J. MIX CHWR	Lockheed Martin Missiles & Space Company PALO ALTO, CALIFORNIA <b>HEAT EXCHANGER/ COOLANT PLUMBING ASSY</b>
REVISION STATUS OF SHEETS WILL ALL CARRY THE SAME REVISION LETTER		2A07923 INCUBATOR HEAT ASSY USED ON APPLICATION	CONTR 7-100401-AC01 -01-ACB81220	SIZE: E SCALE: 2:1 DRAWING NO: 2A07936 REV: A SHEET 1 OF 3

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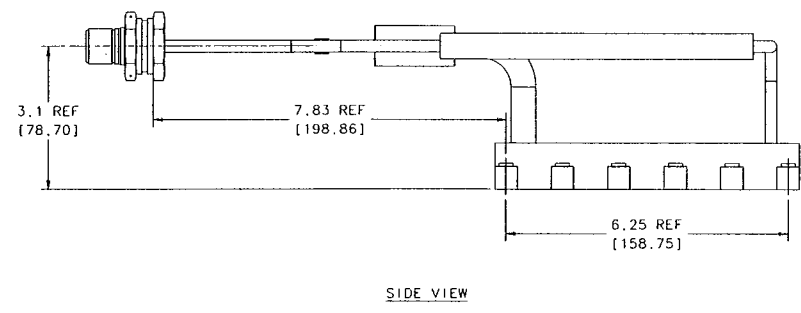
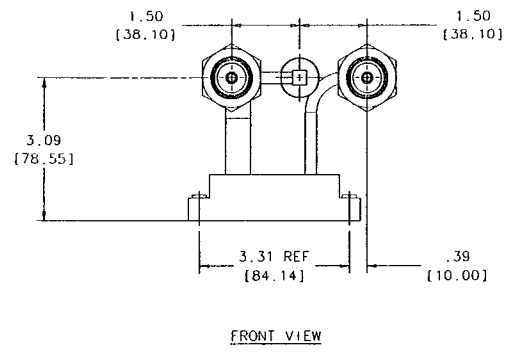
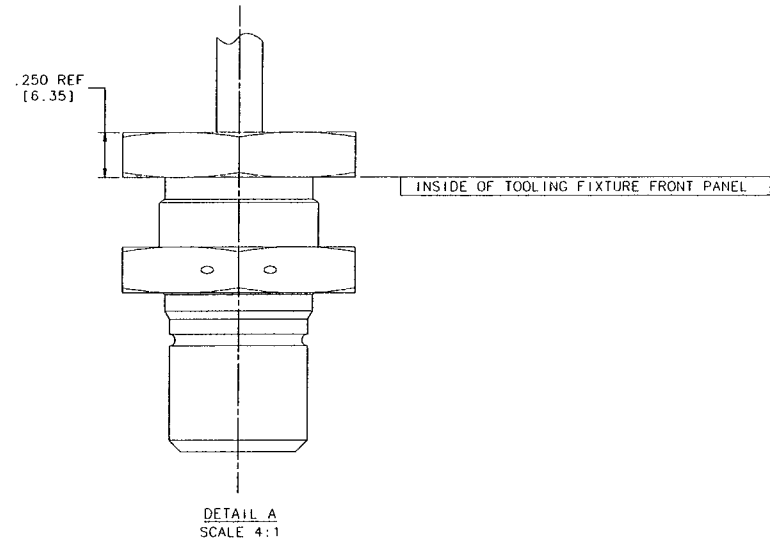
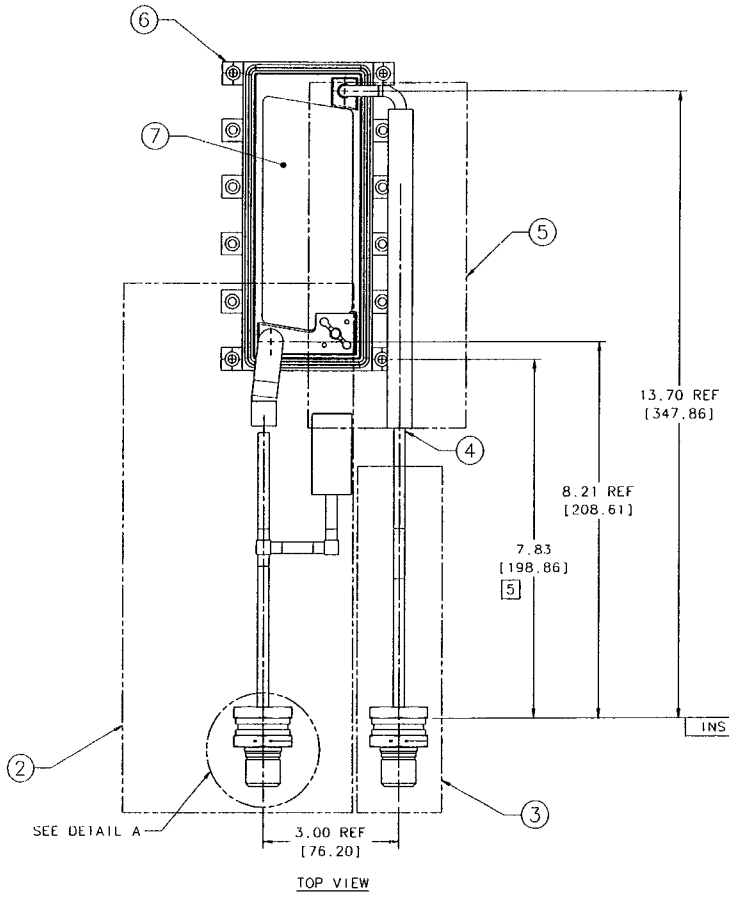
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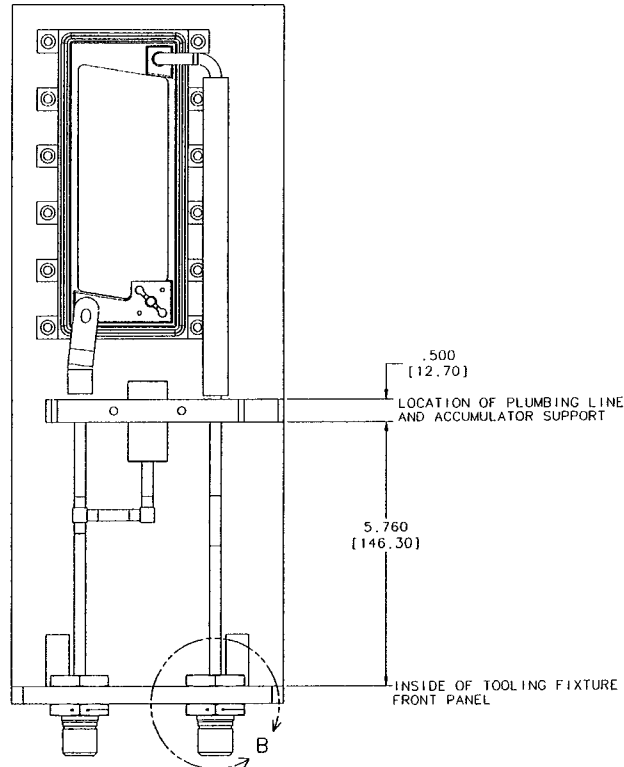
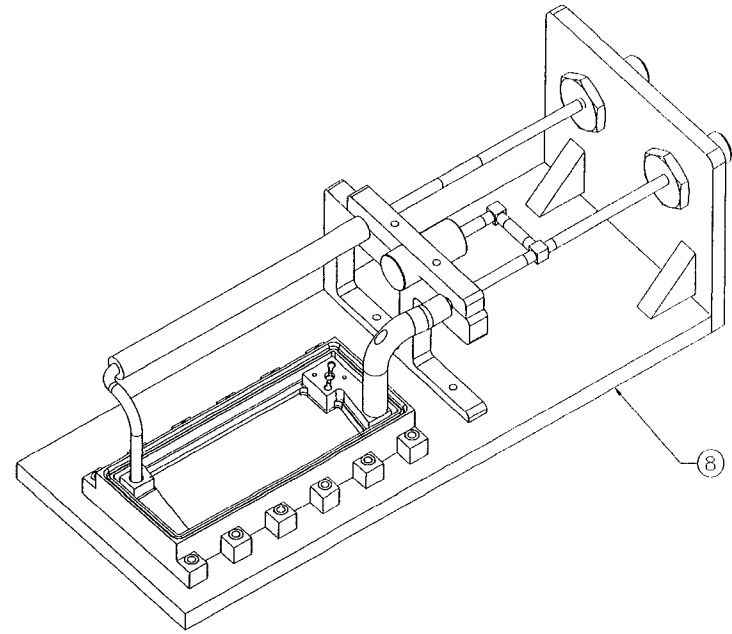
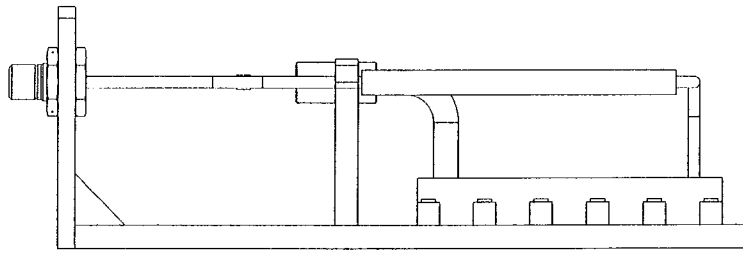
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APVD



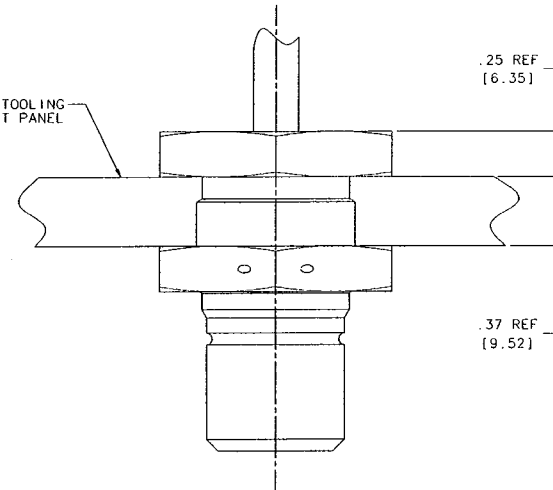
SIZE	SAGE CODE	DRAWING NO	REV
E	65113	2A07936	A
SCALE 1:1		SHEET 2	

65113 2A07936 1/8"

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APVD



INSIDE OF TOOLING  
FIXTURE FRONT PANEL



DETAIL B  
SCALE 4:1

-601 TOOLING FIXTURE

SIZE	CODE	DRWING NO	REV
E	65113	2A07936	A
SCALE 1:1		SHEET 3	

65113 Rev. 8 2A07936 3 of 3