SECURITY REVIEW	UNCL. CONF. SECRET DI. RD GP. 1234
CLASSIFIER	

NOTES:

1. FOR FUELING INSTRUCTIONS SEE DWG. 010-80001.
2. FOR MODULE INSTALLATION, OUTGAS, BACKFILL AND PERFORMANCE TEST SEE DWG 010-80002.
3. FOR GENERATOR INSTALLATION AND RTG HANDLING SEE OPERATING AND MAINTENANCE MANUAL.
4. (1) THIS PART IS USED FOR TEST OR HANDLING PURPOSES ONLY.
5. (2) PACK VOIDS AROUND EACH MIN-K RING WITH A-100 INSULATION. PACKING TECHNIQUE TO BE DEVELOPED.
6. (3) APPLY 'O' RING LUBRICANT LIGHTLY PER ESTABLISHED LAB. PRACTICE FOR HIGH TEMPERATURE, HIGH VACUUM, APPLICATION.
7. (4) COAT SURFACE WITH MILK OF MAGNESIA BEFORE INSTALLATION.
8. (5) WRAP TEFLON TAPE AROUND PIPE THREADS.
9. -019 ASSEMBLY IS THE "PRE-FUELED GENERATOR ASSY" AS FABRICATED FOR SHIPMENT TO THE FUELING FACILITY. THIS ASSEMBLY IS TO BE PUMPED DOWN TO A LEVEL SUFFICIENT TO RUN A HELIUM LEAK CHECK. PERFORM A COLD GROSS TEST ON THE UNIT. GROSS LEAK RATE MUST NOT EXCEED 1×10^{-6} CC/SEC HELIUM WHEN MEASURED IN A TWENTY MINUTE PERIOD. BACKFILL WITH ARGON TO 2 PSIG.
10. (6) THIS DIMENSION TO BE 2.946 (COLD) FOR -019 ASSEMBLY. TRIM OR SHIM AT BASE OF SHIELD (010-70003-001) TO OBTAIN PROPER DIMENSION.
11. (7) PROPER MIN-K PRELOAD IS TO BE OBTAINED IN THE FOLLOWING MANNER:
    - A. MEASURE AND RECORD THE DIMENSION FROM VESSEL FLANGE TO HOLD DOWN RING UPPER SURFACE.
    - B. MEASURE AND RECORD THE DIMENSION FROM LID SEAL SURFACE TO SHEAR LIP.
    - C. SUBTRACT DIMENSION FROM STEP 'B' FROM THAT RECORDED IN STEP "A".
    - D. TOTAL HEIGHT OF THE THREE MIN-K RINGS (010-70002-011, -021 & -023) IS TO BE DIMENSION RECORDED IN STEP "C" +.105 ±.010.
12. (8) ASSURE THAT LOAD RING (010-70006-003) RESTS ON SHIELD (010-70003-001)
13. (9) UPPER EDGE OF MIN-K IS TO BE .06 ABOVE UPPER EDGE OF 010-70006-003 TO ASSURE PROPER PRELOAD ON MIN-K.
14. (10) THIS PART IS TO BE MADE FROM EXP 0132-001 AFTER FUELING, PRIOR TO MODULE INSTALLATION AND IS TO BE USED TO EFFECT COOLING OF HEAT SHIELD. FINNED SHIPPING HEAD (010-40001-009) IS USED IN CONJUNCTION WITH THIS PART.
15. (11) COAT BOTH SURFACES OF INTERFACE WITH A LIGHT COAT OF DOW 340 HEAT SINK COMPOUND.
16. (12) APPLY A GENEROUS AMOUNT OF ZINC CHROMATE PASTE TO THE SHANK OF ALL BOLTS PRIOR TO FINAL ASSEMBLY.
17. (13) APPLY WEATHER BAN 101 (WHITE) OVER HARDWARE SHOWN.
18. (14) INSTALL WIRE LOOPS IN MIN-K RINGS TO FACILITATE REMOVAL.

(B)

(A) (16) 20. POKE WELD #20 GA. INSULATED CHROMEL-ALUMEL T/C'S APPROX. AS SHOWN WITH 6'-8' LEADS. TERMINATE WITH PATCH PLUG. POT SLOT WITH SUITABLE COMPOUND. PROTECT WIRES AT LID EDGE WITH HEAT SHRINABLE TUBING.

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	ADDED PART NOS 010-40005-001, 21F2-5, 5601-3208-A005, 5606-3208-A002 & 5601-3208-A001. REMOVED MS35338-102. ADDED NOTE 19 & 20	8-13-71	J. HIMES
	B	ADDED 001-60006-025; QTY OF MS-35206-228 WAS 16; 010-30000-019 WAS 010-30000-009. REMOVED NOTE 19, 010-40003-001, TG-80-A1GT, MS 35207-282, AN 960 D416L. QTY OF AN 960 D416L WAS 8. 010-70012-009 WAS 001-70078-001. REV SHTS 2 & 3	6-5-72	J. HIMES
	C	ADDED -001, 1000, 1001, 1002. QTY OF 010-60000-001, 010-60000-002 AND 001-60006-025 WAS 2. REV SHT 2 & 3	4/7/75	J. HIMES

QUANTITY / DASH NO.					ITEM NO.	PART OR IDENTIFYING NO.	ZONE	SH	SER SYM	NOMENCLATURE OR DESCRIPTION		STOCK SIZE	MATERIAL OR VENDOR	ISSUE COND	MATERIAL SPECIFICATION	FINISH OR MFR CODE	REV
				1		5601-3208-A010				TEST CABLE	(1)		BURTON ELECT. CO				A
				1		5601-3208-A001				SHORTING PLUG			BURTON ELECT. CO				A
				1		5606-3208-A002				ELECTRICAL RECEPT.			BURTON ELECT. CO				A
			1			010-60000-001				NAMEPLATE, COMPANY							C
			1			010-60000-002				NAMEPLATE, RADIATION							C
						001-60006-025				NAMEPLATE, SPECIAL							BC
		34				AN 315 D10R				NUT, HEX							
		24				MS 35206-228				SCREW							B
			4			322047				TERMINAL			AMP INC.				
		8				AN 509DD416R11				SCREW					IN STOCK		
																	B
		3				NAS 1351C5-36				SCREW, SOCKET HD. CAP							
		4				MS 51958-87				SCREW							
			3			21F2-5				WASHER, INSULATING							A
		68				AN 960 D1016				WASHER							
			4			AN 960 D416L				WASHER							
			2			NAS 549LB				WASHER							
		1				AN 932D5				PIPE PLUG							
																	B
		1				2-473-77-545				VITON "O" RING		PARKER SEAL CO.					
		1				2-471-77-545				VITON "O" RING		PARKER SEAL CO.					
		3				2-137-77-545				VITON "O" RING		PARKER SEAL CO.					
		3				2-130-77-545				VITON "O" RING		PARKER SEAL CO.					
		X	X			001-90062-009				OUTGAS & BACKFILL EQUIPMENT							
			3			010-70012-009				GETTER ASSY							B
			4			001-40028-003				LOCK WASHER							
		34				001-40028-001				LOCK WASHER							
			4			001-40026-005				CAP SCREW							
		4				010-70010-001				WASHER							
		A.R.				010-70009-003				SHIM							
		A.R.				010-70009-001				SHIM							
		3				010-70008-001				LOCK WASHER							
		3				010-70007-001				BOLT							
		1				010-70006-003				LOAD RING, UPPER							
		1				010-70006-001				LOAD RING, LOWER							
		1				010-70005-001				INSULATION, GLASROCK							
		1				010-70004-001				SHIELD PLUG							
		1				010-70003-001				SHIELD BODY							
		3	3			010-70011-001				GUIDE PIN	(1)						
			2			1002				DECAL			ART BY F. FAHDT				C
			8			1001				THREAD CUTTING SCREW		#10-32 × 3/8 LG	McMASTER-CARR 90071A827				C
			8			1000				THREAD CUTTING SCREW		#6-32 × 3/8 LG	McMASTER-CARR 90071A146				C
		6				010-70002-026				INSULATION MIN-K							
		6				010-70002-025				INSULATION MIN-K							
		2				010-70002-023				INSULATION MIN-K							
		2				010-70002-021				INSULATION MIN-K							
		1				010-70002-018				INSULATION MIN-K							
		1				010-70002-017				INSULATION MIN-K							
		2				010-70002-015				INSULATION MIN-K							
		2				010-70002-013				INSULATION MIN-K							
		2				010-70002-011				INSULATION MIN-K							
		2				010-70002-007				INSULATION MIN-K							
		2				010-70002-005				INSULATION MIN-K							
		2				010-70002-003				INSULATION MIN-K							
		2				010-70002-001				INSULATION MIN-K							
		1				010-70000-001				GENERATOR HOUSING							
			1			010-40005-001				INSULATOR, ELECTRIC							A
		2				010-40004-003				COVER PLATE	(1)						
		1				010-40004-001				COVER PLATE							
		16				010-40002-003				CAP SCREW							
		18				010-40002-001				CAP SCREW							
		1				010-40001-009				RAD. FIN ASSY SHIPPING HEAD							
		1				010-40000-009				LID ASSY							
			1			010-30000-019				MODULE ASSY							B
			1			010-20000-009				FUEL CAPSULE ASSY							
			X			EXP 0132-009				HEAT SINK	(10)						
		1				EXP 0132-001				DUMMY MODULE							
			2			-001				SHEET, NAMEPLATE		012 × 23.0 × 27.0	1100H24 AL. ALY SHT				C
			1			-019				PRE-FUELED GEN. ASSY							
			1			-009				GENERATOR ASSY							

ODD DASH NO. SHOWN — EVEN DASH NO. OPP — LIST OF MATERIAL

D1

TI APERTURE CARD

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND ARE AFTER PLATING. TOLERANCES ON: FRACTIONS ±1/32, DECIMALS .X ±.1, .XX ±.03, .XXX ±.010, ANGLES ±1/2°

MIL-I-8500 STATUS: INTERCHANGEABLE / REPLACEABLE / UNCONTROLLED

CALC WT	DASH NO.	NEXT ASSY	USED ON	NEXT ASSY	FINAL ASSY	TEST
	009	010-90001				
		APPLICATION		QTY REQD		

CONTRACT NO.

		DATE
DRAWN BY	L. D. RICHTER	8/2/71
CHECKER	J. Himes	8-2-71
STRESS ENGR		
MATL ENGR		
RELIABILITY		
GR ENGR		
PROJECT ENGR	E. M. Young	8-2-71

ISOTOPES NUCLEAR SYSTEMS DIVISION, A TELEDYNE COMPANY, Baltimore, Maryland

GENERATOR ASSEMBLY
SENTINEL 100F

SIZE	CODE IDENT NO.	
E	30856	010F10000

SCALE — SHEET 1 OF 3

8510110147

I-E-114