

E01-SAA09FT06-030
SHEET 9 OF 16SAA09FT06-030
OCT 10 1990S040244
ATTACHMENT
Page 24 of**CRITICAL ITEM:** Pressure relief vent/pneumatic actuator**Find Number:** PRI**System:** Environmental Control Subsystem
for the Payload Canister, Set 2**Failure Category:** 1S**SAA No.:** 09FT06-030**NASA Part No.:** None**PMN/Name:** H70-1326**Mfr's Part No.:** Johnson Controls Co.
Model D-3153-4, D-9502**Drawing/Sheet No.:** 79K15392, Sheet 3**Function:** Operates the canister relief vent in response to a 3-15 psig signal from the pressure modulator in the ECS control panel.**Critical Failure Mode:** Fail open (FMN 09FT06-030.011)**Cause:** Internal part failure**Failure Effect:** Loss of smother mode capability. Loss of ability to contain a fire or payload hypergol leak. Possible loss of life or payload.**ACCEPTANCE RATIONALE:****Design:**

- o **Materials:** Body - die cast aluminum
Diaphragm - synthetic elastomer
- o **Specifications:**

	<u>Rated</u>	<u>Actual</u>
Pressure (psig)	25 (max)	3 to 15
Temperature (°F)	-65 to +200	Ambient

Test:

Operational checks will be made at validation test, semiannually, at component replacement, and prior to each critical operation as outlined in OMI E3005 and OM E6405.

Inspection:

When testing vent opening, per File VI OMRSD requirements, visual inspection will detect actuator failure.

Failure History:

There is no MDAC PRACA failure history in the critical mode. Data on Set 1 from 1981 to present; data on Set 2 from 1984 to present.

Operational Use:

Systems are secured and personnel are evacuated in accordance with OMI E3506 (vertical) and OMI L5050 (horizontal), Appendix Z.