

E01-SAA09FT06-011
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S040244
ATTACHMENT
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SFP Item: Pressure Relief Valve
Find Number: A103649
Criticality Category: 2

<u>SAA No:</u> 09FT06-011	<u>System/Area:</u> Fluid & Gas Subsystem P/L Canister Transporter
<u>NASA Part No:</u> 79K80160-12	<u>PMN/Name:</u> A70-0892
<u>Mfg Part No:</u> Anderson Greenwood Co. 81JS48-4	<u>Drawing/Sheet No:</u> 79K08346/ 2

Function: Provides GHe overpressure protection for the fluid and gas system.

Critical Failure Mode: Fail open (FMN 09FT06-011.010)

Cause: Internal part failure

Failure Effect: Loss of GHe to the canister interface panels A thru E. Loss of GHe purge may result in damage to the payload. Failure is detectable by the I&CS.

Acceptance Rationale

Design:

- | | <u>Rated</u> | <u>Actual</u> |
|---|--------------|---------------|
| o Component Specification: | | |
| Set Pressure Range (psig) | 1776-1675 | 2255/2074 |
| Temperature (°F) | -20 to 250°F | Ambient |
| o Materials: | | |
| Body - 316 SST | | |
| Internal metal parts - 300 series SST | | |
| Seat - Vespel SP-1 | | |
| Seals - Teflon | | |
| o Set cracking pressure 2255 psig, reseal pressure 2074 psig. | | |
| o Flow capacity approx. 1800 CFM at mid-range of rated set pressure as noted above. | | |

Test:

- o The valve was procured and accepted in accordance with the requirements of NASA component specification 79K80160.
- o Annual in place calibration for cracking pressure, reseal pressure and leak check at component replacement per OMI E6401.

Inspection:

- o Verify current relief valve calibration prior to each operational use per OMI E2004.

Failure History:

- o No MDAC PRACA failure history in the critical failure mode.

Operational Use:

- o N/A