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SAA09FT06-011
Rev. C

SFP Item: Pressure Regulator

OCT 10 1990

Find Number: A103675

Criticality Category: 1S

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SAA No: 09FT06-011

System/Area: Fluid & Gas Subsystem P/L
Canister Transporter

NASA Part No: 79K80007-1

PMW/Name: A70-0892

Mfg Part No: Tescom Corp./Fluid Division
26-1620-34-353

Drawing/Sheet No: 79K08346/
2

Function: Regulates 75 psig GN₂ to 20±2 psig.

Critical Failure Mode: Regulates low (FMN 09FT06-011.004)

Cause: Internal part failure

Failure Effect: Possible loss of GN₂ to ECS Valve Control Panel. Loss of canister vent control to smother in event of fire. Potential loss of life or payload.

Acceptance Rationale

Design:

- o Component Specification:

	<u>Rated</u>	<u>Actual</u>
Pressure (psig)	inlet 6000/50 outlet	75/20
Temperature (°F)	-20 to 250°F	Ambient
- o Materials: Body - 300 series SST
Seals - Teflon and Kel-F
Diaphragm - neoprene
- o Required flow 4 SCFH with 0-30 psig. (Available flow 13.8 SCFH for 11 hrs. per "K" Bottle).
- o Flow capacity 0.04 SCFH/PSIA inlet pressure (air).

Test:

- o The valve was procured and accepted in accordance with the requirements of NASA component specification 79K80007.

Inspection:

- o Regulator pressure setting is checked prior to each operational use per OMI E2004.

Failure History:

- o MDAC PRACA reported one (1) failure of this regulator in the fluid and gas subsystem as follows; Problem Report No. A70-0892-01-PO01, dated 7/31/84, indicated regulator did not maintain set pressure. Regulator was replaced and system operated normally.

Operational Use:

- o N/A