

S050234HV
 Attachment 2
 Sheet 3 of 14
 OCT 27 1998

USA Ground Operations CIL Sheet

SAA09SY13-001
 Rev. C

Critical Item: Back Pressure Regulator
 NASA Part No: None
 Mfg/Part No: Consolidated Controls Corp. / 1454 CK-P1Q1
 System: Facility Potable Water System

Criticality Category: 1S
 Total Quantity: 1

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
A37560	1	Pad-A	K60-0619	427 01	79K16270 / 5

Function:

Maintains appropriate system pressure by controlling pressure in hydropneumatic tank T-4.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09SY13-001.015	Structural failure or corrosion	Visual	1S
Regulates low	Excessive bleeding off of tank pressure, resulting in low system pressure. Loss of water supply to MLP interface. Possible loss of life in a hazardous condition.	Immediate	

ACCEPTANCE RATIONALE

Design:

- Rated pressure: 0-2500 psig
- Actual pressure setting: 185 psig
- Body material: Stainless steel 304
- Dome material: Stainless steel 304
- Valve seat material: KEL-F
- Diaphragm material: Polyurethane
- Packing material: Buna N
- External leakage: 0 psig
- Internal leakage: 10 scfm

Test:

- System premission validation (OMI M2043) requires verification of proper tank T-4 pressure, and safety facilities flow tested for adequate pressure.
- OMRSD File VI requires verification of proper operation semi-annually and at component replacement.

Inspection:

- OMI M6009 requires visual inspection of system components for evidence of housing leakage and structural integrity semiannually.

Failure History:

- Current data on test failures, unexplained anomalies, and other failures experienced during ground processing activities can be found in the PRACA database. The PRACA database was researched and no data was found on this component in the critical failure mode.

Operational Use:

Correcting Action	Timeframe
There is no action which can be taken to mitigate the failure effect.	Since no correcting action is available, timeframe does not apply.