

5050234HV  
 Attachment 2  
 Sheet 14 of 14  
 OCT 27 1996

SAAD9SY13L0-001

**USA Ground Operations CIL Sheet**

Critical Item: Check Valve

Criticality Category: 1S

NASA Part No: None

Total Quantity: 9

Mfg/Part No: Hammond Valve Corp. / 903

System: Potable Water System

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
A516736	1	MLP-1	K61-2921	427.01	80K56359 / 2
A516736	1	MLP-2	K61-2922	427.01	80K56359 / 3
A516736	1	MLP-3	K612923	427.01	80K56359 / 4
A516742	1	MLP-1	K61-2921	427.01	80K56359 / 2
A516742	1	MLP-2	K61-2922	427.01	80K56359 / 3
A516742	1	MLP-3	K612933	427.01	80K56359 / 4
A516748	1	MLP-1	K61-2921	427.01	80K56359 / 2
A516748	1	MLP-2	K61-2922	427.01	80K56359 / 3
A516748	1	MLP-3	K61-2933	427.01	80K56359 / 4

**Function:**

Prevent backflow and maintain water pressure at the fire sprinkler heads in the event of upstream loss of pressure.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09SY13L0-001.002	Structural failure or corrosion	Visual	1S
Fails closed	Loss of water supply to the fire sprinkler heads. Possible loss of life in the event of fire.	Immediate	

**ACCEPTANCE RATIONALE**

**Design:**

- Non-shock
- Swing check, bronze body, bronze disc, screwed ends.
- Operating pressure: Rated: 200 psig Actual: 50 psig
- Maximum operating temperature: 150 degF
- The cleanliness requirements of potable water preclude contamination

**Test:**

- Semiannual verification of water flow through the associated inspectors test valve to verify proper check valve operation if performed per OMI M2087.
- OMRSD File VI requires verification of proper operation semi-annually and all component replacement.

**Inspection:**

- Semiannual visual inspection for corrosion is performed per OMI M2087

**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.