

USA Ground Operations CIL Sheet AUG 23 1999

Critical Item: Valve, Butterfly

Criticality Category: 1S

NASA Part No: None

Total Quantity: 1

Mfg/Part No: Jamesbury Corp / 830L-11-2236MT

System: Facility Water System

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
A159872 (V-280)	1	Pad-A	K60-0042	007.00	79K06011 / 2

Function:

Controls water flow to the LH2 fill valve firex spray nozzles on the northeast pad surface.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09SY03A-001.001 Fail closed	Corrosion, contamination, or failure of internal piece part Loss of firex water supply to the LH2 fill valve firex spray nozzles on the northeast pad surface. Possible loss of life and/or vehicle during a hazardous condition.	Valve position switch Immediate	1S

ACCEPTANCE RATIONALE

Design:

- Rated working pressure 675 psig.
- Actual working pressure 220 psig.
- Rated temperature (degrees Fahrenheit) -20 to 195.
- Actual temperature is ambient pad temperature.

Test:

- OMI M2088 requires cycling of perimeter area water valves to verify proper operation.
- OMRSD, File VI requires verification of the operational function of the water valves in all modes of operation annually and at replacement.
- Manufacturer hydrostat test 450 psig.

Inspection:

- OMI 6045 requires the inspection of the firex valves for signs of corrosion and/or contamination.

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 failure data was found on this component in the critical failure mode.
- The GIDEP failure data interchange was researched and no failure 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.