

USA Ground Operations CIL Sheet

Critical Item: Valve, Butterfly
NASA Part No: None
Mfg/Part No: Bray / 42-0300-11000-466
System: Facility Water System

Criticality Category: 1S
Total Quantity: 1

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
A115202 (V-79)	1	Pad-B	K60-0044-01	007.00	79K40019 / 13

Function:

Controls firex deluge water supply to FSS 53' level hypergol / fuel cell fillport firex spray nozzles.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09SY03B-002.024 Fail Closed	Corrosion, contamination, or failure of internal piece part. Loss of firex deluge water supply to FSS 53' level hypergol / fuel cell fillport firex spray nozzles. Possible loss of life and/or vehicle during a hazardous condition.	Valve position switch Immediate	1S

ACCEPTANCE RATIONALE

Design:

- Rated working pressure 740 psig.
- Actual working pressure is 220 psig.
- Rated temperature (degrees Farenheight) -20 to 100.
- Actual temperature is abient 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.

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.