

USA Ground Operations CIL Sheet

AUG 23 1999

Critical Item: Valve, Butterfly
 NASA Part No: None
 Mfg/Part No: McCanna, Inc. / 8 L300-CS-R-S6/R640/SP2
 System: Facility Water System

Criticality Category: 1S
 Total Quantity: 5

| Find No. | Qty | Area | PMN | Baseline | Drawing / Sheet |
|----------------|-----|-------|----------|----------|-----------------|
| A36989 (V-11A) | 1 | Pad-A | K60-0052 | 007.00 | 79K06011 / 8 |
| A36990 (V-11) | 1 | Pad-A | K60-0052 | 007.00 | 79K06011 / 8 |
| A37023 (V-12) | 1 | Pad-A | K61-3370 | 007.00 | 79K06011 / 7 |
| A37037 (V-10A) | 1 | Pad-A | K60-0049 | 007.00 | 79K06011 / 7 |
| A37039 (V-10) | 1 | Pad-A | K60-0049 | 007.00 | 79K06011 / 7 |

Function:

Controls water flow to the firex/deluge spray nozzles in the associated area.

| Failure Mode No. Failure Mode | Failure Cause Failure Effect | Detection Method Time to Effect | Crit Cat |
|----------------------------------|---|--|-------------|
| 09SY03A-001.018 Fail closed | Corrosion, contamination, or failure of internal piece part. Loss of water flow to the firex/deluge spray nozzles in the associated area. 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.

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. |