

USA Ground Operations CIL Sheet

Critical Item: Valve, Butterfly
NASA Part No: None
Mfg/Part No: Bray / 42-0800-11000-466
System: Facility Water System

Criticality Category: 1S
Total Quantity: 5

| Find No. | Qty | Area | PMN | Baseline | Drawing / Sheet |
|----------------|-----|-------|-------------|----------|-----------------|
| A36989 (V-11A) | 1 | Pad-B | K60-0052-01 | 007.00 | 79K40019 / 7 |
| A36990 (V-11) | 1 | Pad-B | K60-0052-01 | 007.00 | 79K40019 / 7 |
| A37023 (V-12) | 1 | Pad-B | K61-3370-01 | 007.00 | 79K40019 / 7 |
| A37037 (V-10A) | 1 | Pad-B | K60-0049-01 | 007.00 | 79K40019 / 7 |
| A37039 (V-10) | 1 | Pad-B | K60-0049-01 | 007.00 | 79K40019 / 7 |

Function:

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

| Failure Mode No. Failure Mode | Failure Cause Failure Effect | Detection Method Time to Effect | Crit Cat |
|----------------------------------|---|--|-------------|
| 09SY03B-002.018 Fail Closed | Corrosion, contamination, or failure of internal piece part. Loss of firex deluge water supply to the spray nozzles in the associated area. Possible loss of life and/or vehicle during a hazardous condition. | Valve position indication Immediate | 1S |

ACCEPTANCE RATIONALE

Design:

- Rated working pressure 740 psig.
- Actual working pressure 220 psig.
- Rated temperature (degrees Fahrenheit) -20 to 100.
- 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. |