

USA Ground Operations CIL Sheet AUG 23 1999

Critical Item: Valve, Flow Control
NASA Part No: None
Mfg/Part No: Parker-Hannifin Corp / F600S
System: Facility Water System

Criticality Category: 1S
Total Quantity: 1

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
A526689 (V-480.1)	1	Pad-A	K60-0060	007.00	79K06011 / 8

Function:

Provides unrestricted air flow for opening valve V-480 via the check valve, and a controlled rate of closing through the variable orifice.

Failure Mode No. Failure Mode	Failure Cause Failure Effect	Detection Method Time to Effect	Crit Cat
09SY03A-001.007 Check valve fail closed	Corrosion, contamination, or failure of internal piece part. Water control valve V-480 will receive some air pressure via the orifice side of the flow control valve and may open but at a reduced rate, and may not open fast enough to provide timely fire suppression. Additionally, the fire alarm to the JBOSC may be inhibited since it is activated by the flow of firex water that occurs after V-480 has been opened. Possible loss of life and/or vehicle during a hazardous condition.	V-480 position switch Immediate	1S

ACCEPTANCE RATIONALE

Design:

- Rated operating pressure 5000 psig.
- Burst pressure 20000 psig.
- Actual operating pressure 125 psig.

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 valve in all modes of operation annually and at replacement. (Note: Water valve operational function verification ensures valve opens within design opening rate which also verifies check valve has not failed.)

Inspection:

- OMI M6045 requires the inspection of the firex valves for signs of corrosion and/or contamination.

Failure History:

Not Available

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.