

**USA Ground Operations CIL Sheet AUG 23 1999**

**Critical Item:** Valve, Flow Control  
**NASA Part No:** None  
**Mfg/Part No:** Deltrol Corp / F25B  
**System:** Facility Water System

**Criticality Category:** 1S  
**Total Quantity:** 9

Find No.	Qty	Area	PMN	Baseline	Drawing / Sheet
A154686 (V-46.3)	1	Pad-A	K60-0060	007.00	79K06011 / 24
A154687 (V-44.3)	1	Pad-A	K60-0060	007.00	79K06011 / 24
A154693 (V-49.12)	1	Pad-A	K60-0060	007.00	79K06011 / 23
A154694 (V-49.13)	1	Pad-A	K60-0060	007.00	79K06011 / 23
A154710 (V-47.3)	1	Pad-A	K60-0060	007.00	79K06011 / 24
A154711 (V-45.3)	1	Pad-A	K60-0060	007.00	79K06011 / 24
A156595 (V-300.3)	1	Pad-A	K60-0060	007.00	79K06011 / 25
A156601 (V-301.3)	1	Pad-A	K60-0060	007.00	79K06011 / 25
A157158 (V-255.5)	1	Pad-A	K60-0060	007.00	79K06011 / 25

**Function:**

Provides unrestricted air flow for opening associated water control valve 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-001.006  Check valve fail closed	Corrosion, contamination, or failure of internal piece part.  If the check valve should fail closed, associated water control valve will receive some air pressure via the orifice side of the flow control valve. The water control valve may open but at a reduced rate, and may not open fast enough to provide timely fire suppression. Possible loss of life and/or vehicle during a hazardous condition.	Valve position switch  Immediate	1S

**ACCEPTANCE RATIONALE**

**Design:**

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

**Test:**

- OMI M2067 requires cycling of FSS/RSS water valves to verify proper operation.
- OMRSD, File VI requires verification of the operational function of the water valves in all modes of operation semiannually 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 6045 requires the inspection of the fire 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.

USA Ground Operations CIL Sheet

AUG 23 1999

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

**Operational Use:**

<b>Correcting Action</b>	<b>Timeframe</b>
There is no action which can be taken to mitigate the failure effect.	Since no correcting action is available, timeframe does not apply.