

SA098510-001  
B/L: 400:02  
SYS: Breathing  
Air at RP5F

Critical Item: Pressure Regulator AUG 25 1989

Find Number: A504530

Criticality Category: 15

S&S No: 098510-001

System/Area: Breathing Air at RP5F

MUSA  
Part No: None

PMU/ A77-1364  
Name: Unit, Air Purifying, Mobile

Mfg/ Parker  
Part No: D0K111AA

Drawing/ 80K51625  
Sheet No: 1

Function: Reduces and regulates air pressure to 9 psi to facilitate the monitor/alarm system.

Critical Failure Mode: FM No. 098510-001.001

Regulates High

Failure Cause: Structural failure/Contamination

Failure Effects: The failure mode causes improper flow to the monitor/alarm assembly. Possible loss of life during a hazardous condition. Alarm will not operate.

Acceptance Rationale.

Design:

The regulator is designed for 250 psi at the input and 0 to 60 psi at the output. The regulator is operated at 40 to 50 psi input pressure and 7 to 9 psi output pressure. This system contains an upstream filter to protect against contamination related failures.

Inspection:

The regulator pressure is adjusted semi-annually.

DWRSD File VI requires that the pressure is verified and adjusted prior to each use.

5A09G510-001  
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Pressure Regulator (Continued)

AUG 23 1989

Test:

The pressure is checked monthly during system operational check.

Failure History:

- a There was no failure history in the critical failure mode recorded in the PRACA system.
- a There was no failure history in the critical failure mode recorded in the GIDEP system.

Operational Use:

The flow medium is dry, contamination free, non-lubricated air. The regulator is necessary to reduce the air pressure to 7 to 9 psi for proper sensing. Primary action to be taken to circumvent the failure is to install E062 to 79K21305 with an O2 alarm circuit. There is not an alternate means of operation after the failure occurs.