

SAA09GS05-003
REV. 8
B/L: 72.60
SYS: ECS/SLF/SLS

AUG 11 1968

Critical Item: Temperature Switch

Find Number: A125580

Criticality Category: 15

SAA No: 09GS05-003

System/Area: ECS/SLF/SLS

NASA
Part No:

PMN/ 570-0534/
Name: Portable Purge Unit

Mfg/ Gunham Bush/Penn Controls
Part No: CNT 231
A19AAF

Drawing/
Sheet No: 79K06061/1

Function: Disables compressor when separator oil is below predetermined setting.

Critical Failure Mode: Contacts fail open. FM No. 09GS05-003.C22

Failure Cause: Structural failure/contamination.

Failure Effect: Compressor shuts down. Interlock causes blower shutdown. Loss of purge to Orbiter compartments. Loss of ability to monitor purge air for leaks. Possible loss of life or vehicle during a hazardous condition such as leakage of hazardous fluids or gases.

Acceptance Rationale

Design:

- o Designed for use with refrigerant-12 environment.
- o Cutout Temperature: Switch open when oil is below 90°F.
- o "Trip-Free" manual reset.
- o Single-pole/single-throw contacts which open on temperature drop.

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Temperature Switch A125580 (Continued)

Test:

- o The OMRSD, File VI will require that operation of the purge unit is verified prior to each use.
- o The purge unit is powered up and verified operational approximately three hours prior to Orbiter landing per OMI S002B and S0026.

Inspection:

- o The contact points are inspected monthly for electrical overheating or arcing (OMI No. VC672).

Failure History:

- o No PRACT failure history identified.
- o No GIDEP failure history identified.

Operational Use:

- o The purge unit is monitored for any indication of malfunction. If found defective, the switch can be repaired locally.

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