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SAA09HSLD1-001  
REV. CB/L: 320.10, 320.20  
SYS: Orbiter  
Postlanding  
Booms and  
GSE Trans-  
porter TrailersCritical Item: Circuit Breaker (1/PPU Trailer, 3 Total)  
Find Number: NA  
Criticality Category: 1S

MAR 24 1993

SAA No:	09HSLD1-001/C	System/Area:	Orbiter Postlanding Booms and GSE Transporter Trailers/ SLF, SL3-1, SL3-2
NASA Part No:	NA	PMN/ Name:	A70-0844/Orbiter Postlanding PPU Transporter Trailer
Mfg/ Part No:	ITE/ KP3-B100	Drawing/ Sheet No:	79K09685/ 18

**Function:** Provides circuit overload protection and controls power from the generators to the PPU, boom and support equipment.

**Critical Failure Mode/Failure Mode No:** Premature Trip/09HSLD1-001.003

**Failure Cause:** Internal Structural Failure

**Failure Effect:** Loss of power to the PPU. Loss of conditioned air flow to the Orbiter. Unable to delocalize and evacuate hazardous gases in the event of a leak within the Orbiter. Possible fire or explosion.

Possible loss of life and/or vehicle in the event of a hazardous condition.

**Time to effect:** Immediate.

**Detection method:** Shutdown of PPU and boom hydraulic unit.

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## ACCEPTANCE RATIONALE

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## Design:

Rated	Trip Set	Estimated Maximum Operating Load
1000 Amp	900 Amp	625 Amp

## Test:

- The OMRSD File VI requires time/current trip test and insulation resistance test performed prior to installation and after fault (ref. GP1002, Maintenance Test Criteria for Circuit Breakers).

## Inspection:

- OMRSD File VI requires inspection and maintenance per GP1002. Operations will verify status of breaker prior to use (Postlanding Ops OMI).

## Failure History:

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

## Operational Use:

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

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