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## FAILURE MODE EFFECTS ANALYSIS/CRITICAL ITEMS LIST

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FMEA NUMBER: PRD-FM04

ORIGINATOR: JSC

PROJECT: GFE - SHUTTLE

PART NAME: 4 Inch Hook  
 LRU PART NUMBER: 10163-10063-03  
 DRAWING:

PART NUMBER: 10163-20067-01  
 LRU PART NAME: PRD  
 SUBSYSTEM: PRD

QUANTITY: 2  
 SYSTEM: EVA Tools  
 EFFECTIVITY: STS-70

### CRITICALITY:

CRITICAL ITEM? NO

CRITICALITY CATEGORY 1R/3

### REDUNDANCY SCREEN:

A - PASS  
 B - PASS  
 C - PASS

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FUNCTION: Attaches strap to RMS or payload and attaches PRD anchor strap to orbiter.

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FAILURE MODE: Latch jams in closed position prior to use.

CAUSE: Contamination, deformation.

FAILURE DETECTION: N/A

REMAINING PATHS: Spare PRD

EFFECT/ MISSION PHASE: EVA

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### CORRECTIVE ACTION:

Use spare PRD or jettison RMS or payload.

### -FAILURE EFFECTS-

END ITEM: Hook fails to open.

INTERFACE: Unable to interface with RMS, payload or orbiter doors.

MISSION: None.

CREW/VEHICLE : Possible vehicle damage from unsecured payload. Loss of vehicle if PLB doors can't be closed.

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### HAZARD INFORMATION:

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HAZARD: YES\_\_ NO\_\_X

HAZARD ORGANIZATION CODE:

HAZARD NUMBER:

TIME TO DETECT: Immediate

TIME TO CORRECT: Minutes

FAILURE DETECTION/FLIGHT: Visual, tactile

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<b>FMEA NUMBER:</b> PRD-FM04	<b>ORIGINATOR:</b> JSC	<b>PROJECT:</b> GFE - SHUTTLE
<b>PART NAME:</b> 4 Inch Hook	<b>PART NUMBER:</b> 10163-20057-01	<b>QUANTITY:</b> 2
<b>LRU PART NUMBER:</b> 10163-10063-03	<b>LRU PART NAME:</b> PRD	<b>SYSTEM:</b> EVA Tools
<b>DRAWING:</b>	<b>SUBSYSTEM:</b> PRD	<b>EFFECTIVITY:</b> STS-70

### REMARKS

If jams closed during use, webbing can be cut to remove PRD.

### -RATIONALE FOR ACCEPTABILITY-

- (A) DESIGN: N/A
- (B) TEST: N/A
- (C) INSPECTION: N/A
- (D) FAILURE HISTORY: N/A
- (E) OPERATIONAL USE: N/A
- (F) MAINTAINABILITY: N/A

**PREPARED BY:** C. L. Hartman  
**DATE:** 05/24/95

**REVISION:**  
**WAIVER NUMBER:**