

## FAILURE MODE EFFECTS ANALYSIS/CRITICAL ITEMS LIST

FMEA NUMBER: PRD-FM07

ORIGINATOR: JSC

PROJECT: GFE - SHUTTLE

PART NAME: Ratchet Latch Assy

PART NUMBER: 10163-20027-01

QUANTITY: 1

LRU PART NUMBER: 10163-10063-03

LRU PART NAME: PRD

SYSTEM: EVA Tools

DRAWING:

SUBSYSTEM: PRD

EFFECTIVITY: STS-70

CRITICAL ITEM? NO

CRITICALITY:

CRITICALITY CATEGORY\_1R/3\_\_

REDUNDANCY SCREEN:

A - PASS

B - PASS

C - PASS

FUNCTION: Locks ratchet shaft to prevent loosening of webbing.

FAILURE MODE: Jams or binds under tension.

CAUSE: Contamination, broken compression spring.

FAILURE DETECTION: N/A

REMAINING PATHS: Spare PRD

EFFECT/ MISSION PHASE: EVA

CORRECTIVE ACTION:

Use spare PRD to relieve tension, and then remove failed PRD.

-FAILURE EFFECTS-

END ITEM: Unable to lock ratchet with tension on strap.

INTERFACE: Unable to securely restrain RMS, payload or PLB doors.

MISSION: None.

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

HAZARD INFORMATION:

HAZARD: YES\_\_ NO\_X

HAZARD ORGANIZATION CODE:

HAZARD NUMBER:

TIME TO EFFECT: Immediate

TIME TO DETECT: Immediate

TIME TO CORRECT: Minutes

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**FAILURE MODE EFFECTS ANALYSIS/CRITICAL ITEMS LIST**

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FMEA NUMBER: PRD-FM07

ORIGINATOR: JSC

PROJECT: CFE - SHUTTLE

PART NAME: Ratchet Latch Assy

PART NUMBER: 10163-20027-01

QUANTITY: 1

LRU PART NUMBER: 10163-10063-03

LRU PART NAME: PRD

SYSTEM: EVA Tools

DRAWING:

SUBSYSTEM: PRD

EFFECTIVITY: STS-70

FAILURE DETECTION/FLIGHT: Visual, tactile

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**REMARKS**

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**-RATIONALE FOR ACCEPTABILITY-**

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(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

REVISION:

DATE: 03/24/95

WAIVER NUMBER: