
FAILURE MODE EFFECTS ANALYSIS/CRITICAL ITEMS LIST

FMEA NUMBER: EDFT-05-STBD7-8	ORIGINATOR: JSC	PROJECT: DTO 671
PART NAME: ACME SCREW LOCK DEVICE	LRU PART NUMBER: SED39128554-401	QUANTITY: 2
PART NUMBER: R076707-1	LRU PART NAME: BAY 7 STBD INSTALLATION	SYSTEM: EDFT-05
DRAWING: SEE P/N	SUBSYSTEM: N/A	EFFECTIVITY: STS-80

CRITICALITY:CRITICAL ITEM? YES NO CRITICALITY CATEGORY: 1R/3**REDUNDANCY SCREENS:**A - Pass
B - N/A
C - Pass

FUNCTION: Two ACME Screws are used to attach and secure the Battery ORU Simulator Assembly to the CHIA Interface Plate Assembly for launch and landing. The ACME screw locking device consists of two tangs which engage a toothed gear (when the torquing device is removed) in order to prevent each screw from backing out.

FAILURE MODE: Inadvertent release

CAUSE: piece part failure, vibration, thermal distortion

FAILURE DETECTION: none

REMAINING PATHS: Two - remaining locking tang and ACME screw preload

EFFECT/MISSION PHASE: Landing

CORRECTIVE ACTION: None

-FAILURE EFFECTS-

END ITEM: One failure (tang) - no effect.

INTERFACE: N/A

MISSION: None for single failure

CREW/VEHICLE: If multiple failures occur during landing and one screw backs out, the remaining screw may not be able to carry the load and prevent the Battery ORU (350 lbs) from coming free in the PLB and damaging the vehicle.

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FMEA NUMBER: EDFT-05-STBD7-8	ORIGINATOR: JSC	PROJECT: DTO 671
PART NAME: ACME SCREW LOCK DEVICE	LRU PART NUMBER: SED39128554-01	QUANTITY: 2
PART NUMBER: R076707-1	LRU PART NAME: BAY 7 STBD INSTALLATION	SYSTEM: EDFT-05
DRAWING: SEE P/N	SUBSYSTEM: N/A	EFFECTIVITY: STS-80

HAZARD INFORMATION:HAZARD: YES NO

HAZARD ORGANIZATION CODE:

HAZARD NUMBER: N/A

TIME TO EFFECT: Seconds

TIME TO DETECT: N/A

TIME TO CORRECT: N/A

REMARKS:

-RETENTION RATIONALE-

(A) DESIGN:

(B) TEST:

(C) INSPECTION:

(D) FAILURE HISTORY:

(E) OPERATIONAL USE:

PREPARED BY: MURRAY EPSTEIN

REVISION:

DATE: 4/16/96
