

FAILURE MODES AND EFFECTS ANALYSIS

REFERENCE DESIGNATOR: 4	PROJECT: DTO 671 Program	SUBSYSTEM: N/A
NAME / QUANTITY: Push Lock Tether Tool	LRU NAME / QUANTITY: Push Lock Tether Tool (PLTT) //	EFFECTIVITY: ALL ORBITERS
DRAWING REFERENCE: SED99127417	LRU PART NUMBER: SED99127417-301	

FAILURE MODE NUMBER DTO671-64-4-5	CRITICALITY 1FV2	FAILURE EFFECT	FAILURE DETECTION METHOD
FUNCTION The Push Lock Tether Tool (PLTT) is designed to attach and lock to a standard EVA tether loop. The PLTT tool is pressed onto a tether loop that actuates a link between two jaws. A sleeve slides over the captured tether loop which completes the locking action. The ratchet lock is released which allows the jaws to open and disengage the tether loop.		END ITEM The ORU comes loose and is unrestrained in the payload bay.	FLIGHT Visual.
FAILURE MODE AND CAUSE MODE Retractable tether breaks while it is extended.		MISSION None.	GROUND None.
CAUSE(S) 1) Knot(s) fail/improperly assembled. 2) Overload of the tether cord.			CORRECTIVE ACTION For APFR exercises, the crew must attach a secondary equipment tether from the installed PFR or Weight Block Assy. component tether loop to the EMU D-ring.
REUNDANCY SCREENS A - Pass B - N/A C - Pass	REMAINING PATHS 1) Retractable tether stand-by redundant to the locking sleeve.		REMARKS APFR must have the attached mass connected during all translation with the RT.
MISSION PHASE	CORRECTIVE ACTION TIMES		
	TIME TO EFFECT	TIME TO CORRECT	
EVA	Minutes	Seconds	
		CREW / VEHICLE Possible impact of an EMU from loose equipment.	
		INTERFACE ORU.	

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REVISION A

SUPERSEDING DATE NONE

DATE: 5/15/98

DTO-671-41